

HITACHI
Inspire the Next¹

<http://www.hitachi.com/businesses/elevator/index.html>

Contact Address:

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MACHINE ROOM-LESS ELEVATOR

Model OUG **Series ON1**



Creating a New History

Hitachi Group is active in a wide range of business sectors. From the technology and experience built up over many years, come the synergies that feed new innovation.

Hitachi has been developing and manufacturing elevators and escalators since 1924.

As social demands on elevators change over time, Hitachi's machine room-less elevator model OUG series ON1, developed in Japan, meets the needs of customers in terms of efficiency, safety, comfort, and space savings. Hitachi is creating a new history for elevators, and for your building.



History of Hitachi elevators

•**1932**•First elevator is delivered: freight elevator for Tokyo Electric Co. •**1968**•300m/min. elevator is delivered to Japan's first skyscraper: Kasumigaseki Building. •**1991**•Power-saving inverter-controlled ultra-high-speed elevator commences operations: Tokyo Metropolitan Government Building No. 1. •**2003**•300m/min. double-deck elevator is delivered: Roppongi Hills Mori Tower, Tokyo. •**2007**•480m/min, 2,850 kg high-rise shuttle elevator is delivered: Tokyo Midtown, Midtown Tower. •**2008**•World's largest ultra-high-speed double-deck elevator is delivered: Shanghai World Financial Center. •**2011**•600m/min. ultra-high-speed elevator for the Middle East: Al Hamra Mixed-Use Complex, Kuwait. •**2012**•High-speed, large-capacity elevator providing access to Japan's highest (450m) observation platform: Tokyo Sky Tree. •**2016**•Delivery of the ultra-high-speed elevators, with a speed of 1,200 m/min. (20 m/s), to the Guangzhou CTF Finance Centre (530m tall) in Guangzhou, China.

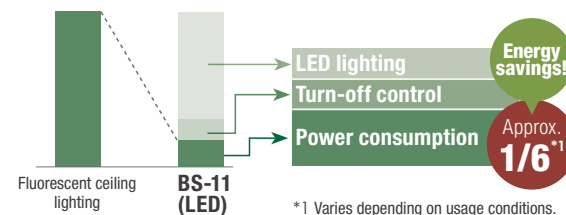
Four classifications of value we provide for your building

Energy efficiency

Page 5, 6

Reduced energy consumption with standard specifications

Power consumption can be reduced to approximately 1/6.



LED lighting

Use of LED lighting gives reduction in energy consumption by approximately 1/4 and its service life three times longer compared with fluorescent lighting.

Automatic turn-off of car lighting and fan

Standard

When the elevator is idle, the lighting and ventilation fan in the elevator are automatically turned off to conserve energy. Energy consumption is reduced by adopting LED lighting for the ceiling and shortening the time until the lighting and fan turn off.

Regenerative system

Option

The traction mechanism acts as a power generator and transmit power back to the building electrical network that reduces energy consumption by approximately 30%.

With regenerative system

Energy savings!

Approx. 30%*2

*2 Effectiveness during normal operation. Effectiveness differs depending on usage conditions.

Comfort

Page 7-9

Improved riding comfort

Standard

Motor control and vibration-absorbing type guide shoes provide a quiet and smooth ride.

Group control systems

Option

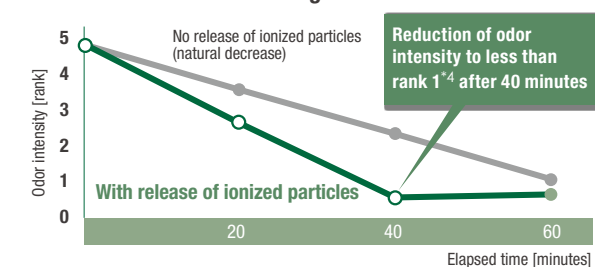
Group control systems provide passengers with appropriate guidance and help reduce the probability of long waits.

Ion generator

Option

Ion generator works to improve air quality.

Elevator interior deodorizing test*3



*3 Results after 40 minutes in test performed in (13-passenger) elevator measuring approx. 5.5 m³. Results may differ from those in actual usage space.

*4 Odor strength rank 1 is defined as "extremely weak odor that is hardly noticeable."

Note: Testing organization: Hitachi Power Solutions Co., Ltd. Testing method: Verification using six-rank odor intensity indication method in passenger elevator with 13-person capacity Deodorizing method: Release of ionized particles Subject: Methyl mercaptan was released and the change in its concentration was measured.



* Artist's conception.

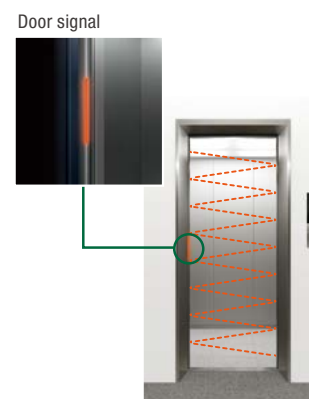
Safety & Emergency

Page 10

Door signal with multi-beam door sensor

Option

Door signal that tells when the door is going to close for enhanced safety.



Micro-leveling

Standard

Automatically corrects the elevator landing level when there is a level difference between car and floor.

Automatic rescue device for power failure

Option

When a power failure is detected, the drive power supply switches over to battery power, and the elevator automatically moves to the nearest floor and releases the passengers.

Design

Page 11, 12

LCD indicators

Option

In-car indicator and hall indicator with color LCD are available. They provide a quick overview of the operating status.



Car and hall design

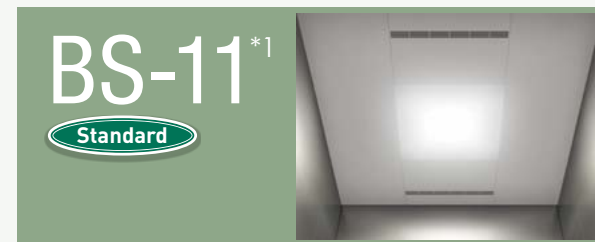
Select the most suitable design from the options available, including ceiling and 3 side walls designs created by Hitachi's designers to match a variety of building types.



Energy efficiency

LED lighting

By adopting LED lighting for all ceiling designs, energy consumption is reduced and service life is prolonged compared with fluorescent lighting.



Power consumption approx. 1/4
that of fluorescent lighting
Employs LED lighting with
approx. 3x^{*2} longer service life.

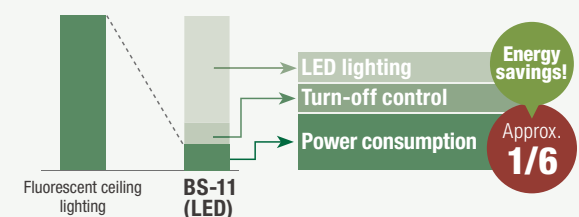
	Fluorescent ceiling lighting		BS-11 (LED)
Power consumption	69 W	►	17 W^{*3}
Service life	Approx. 12,000 hours	►	Approx. 40,000 hours^{*4}

By changing the time until the lighting turns off during standby from three to one minute...

Power consumption can be reduced to approx. 1/6

	Fluorescent ceiling lighting		BS-11 (LED)
Annual illumination duration	Approx. 3,000 hours	►	Approx. 1,500 hours^{*5}
Annual power consumption	Approx. 207 kWh/year	►	Approx. 35 kWh/year

•Reduction of power consumption



Power consumption approx. 1/6
that of fluorescent lighting
Employs LED lighting with
approx. 3x^{*2} longer service life.

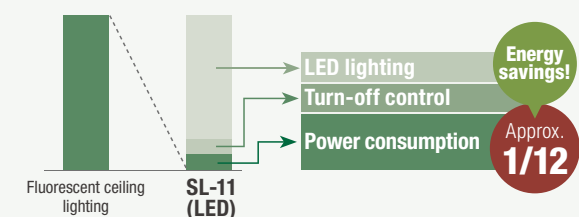
	Fluorescent ceiling lighting		SL-11 (LED)
Power consumption	207 W	►	33 W^{*3}
Service life	Approx. 12,000 hours	►	Approx. 40,000 hours^{*4}

By changing the time until the lighting turns off during standby from three to one minute...

Power consumption can be reduced to approx. 1/12

	Fluorescent ceiling lighting		SL-11 (LED)
Annual illumination duration	Approx. 3,000 hours	►	Approx. 1,500 hours^{*5}
Annual power consumption	Approx. 621 kWh/year	►	Approx. 50 kWh/year

•Reduction of power consumption



*1 These ceilings are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.
*2 Comparison with 10-passenger model with fluorescent ceiling lighting. Results may differ depending on ceiling configuration and dimensions.
*3 Power consumption of fixture including lighting power supply.
*4 Rated service life of fixture including lighting power supply. Actual service life may vary depending on usage conditions.
*5 Varies depending on usage conditions.

Automatic turn-off of car lighting and fan

Standard

When the elevator is idle, the lighting and ventilation fan in the elevator are automatically turned off to conserve energy. Energy consumption is reduced by adopting LED lighting for the ceiling and shortening the time until the lighting and fan turn off.

Regenerative system

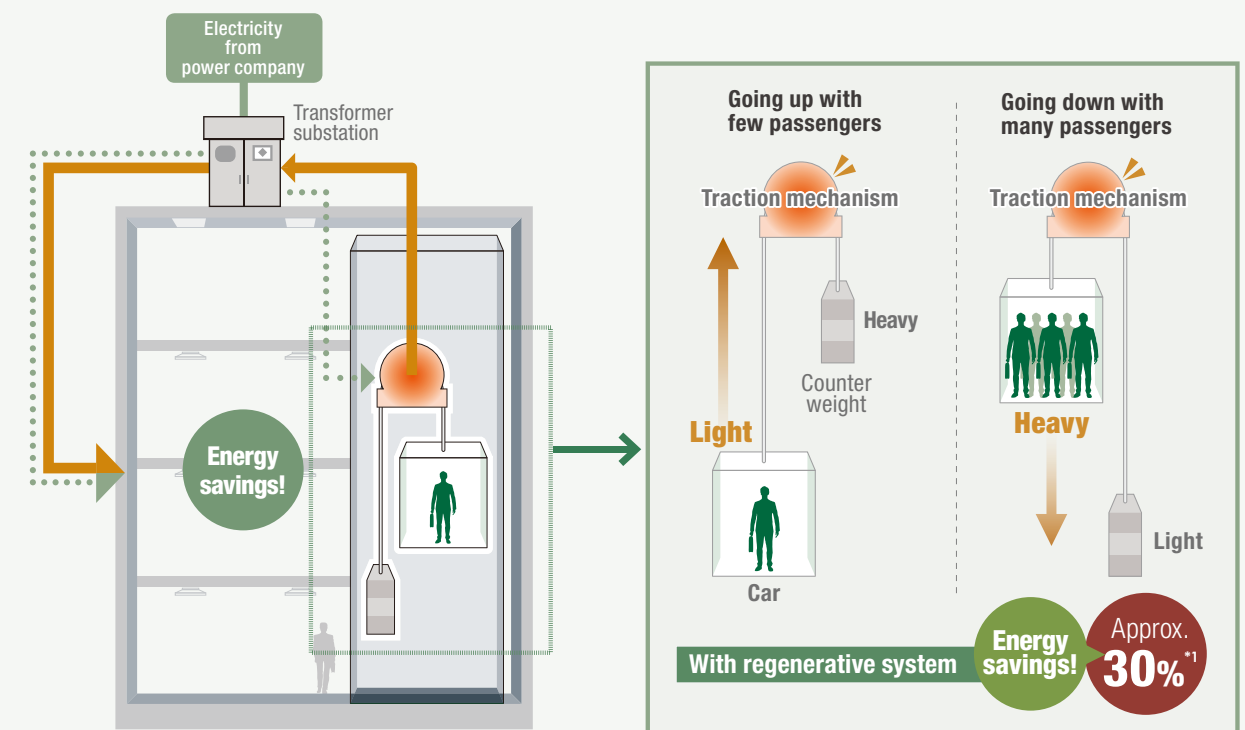
Option

Making use of energy generated by the elevator

Making use of the energy generated by the elevator when traveling downwards with a heavy car load or upwards with a light car load, the traction mechanism acts as a power generator and transmit power back to the electrical network in the building.

Flow of regenerated power

Industrial power
Regenerated power



*1 Effectiveness during normal operation and differs depending on usage conditions.

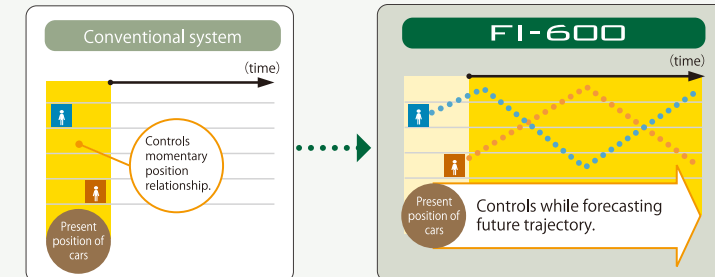
FI-600 Group control system Option

Group control systems help reduce waiting time

Shortening average waiting times and reducing the probability of a long wait^{*1} are the most important tasks of the group control system of an elevator. Hitachi continues to develop control algorithms to meet these needs. The FI-600 employs a new type of algorithm, future reference trajectory control. It helps reduce the probability of long waits.

^{*1} "Long wait" refers to a waiting time of over 60 seconds.

Summary of future reference trajectory control

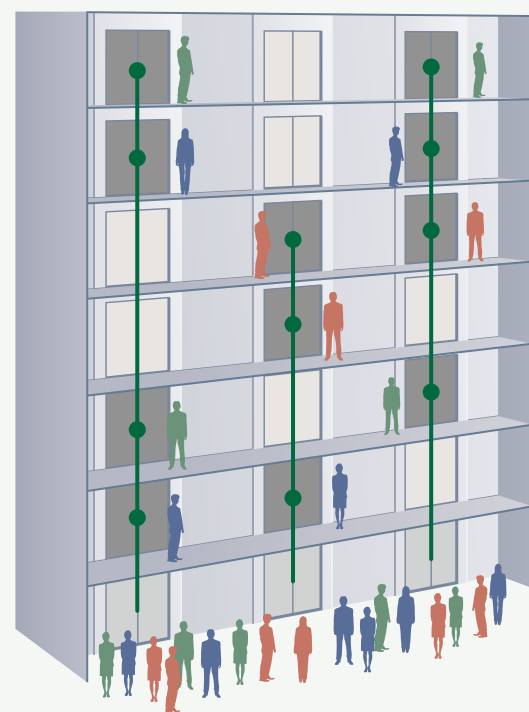


FIBEE Destination floor reservation system Option

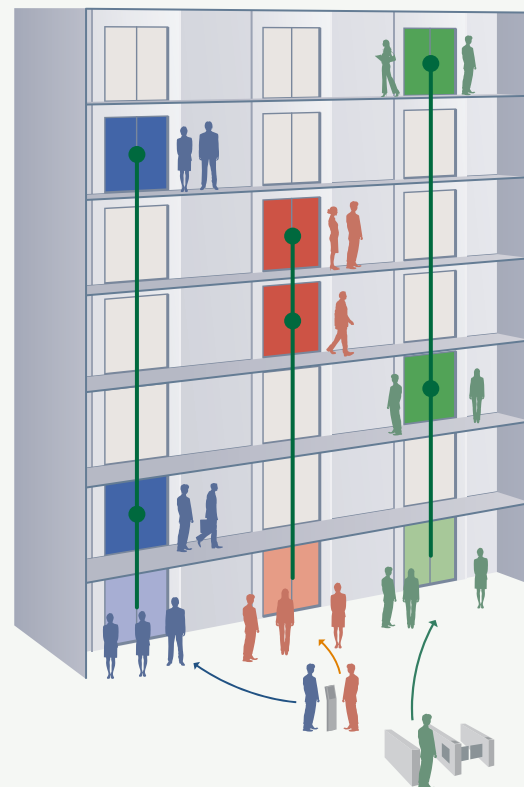
FIBEE leads passengers more reliably to their destination floors

Hitachi has added a destination floor reservation system to the group control system. After each passenger registers their destination floor at the hall, they are informed ahead of time of the elevator they should use. This helps reduce congestion in the hall.

Conventional group control



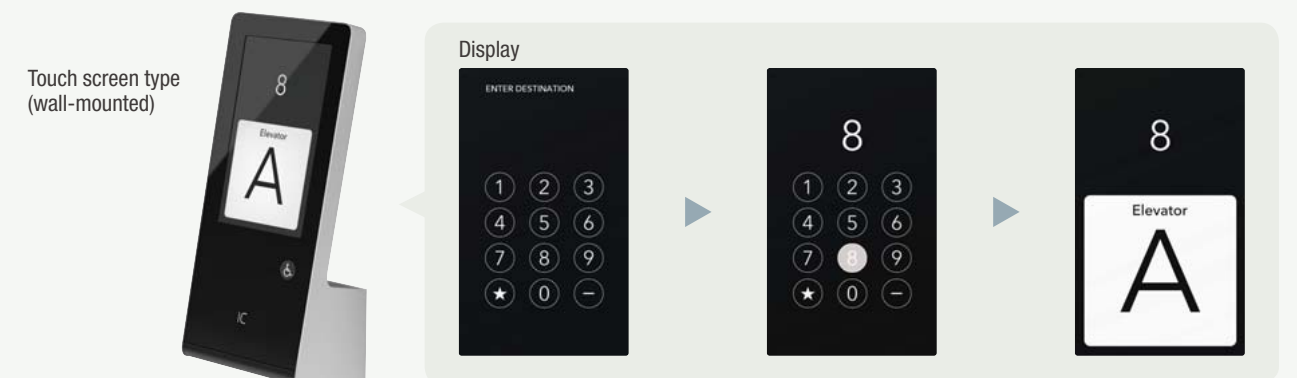
Destination floor reservation system



Using elevators with FIBEE

1. Passenger registers the desired destination floor through the registration device
2. The registration device indicates the elevator that has been assigned.
3. Passenger moves to the front of the assigned elevator and waits.
4. Passenger enters the elevator and will be taken to the destination floor.

Destination floor registration device



Ion generator

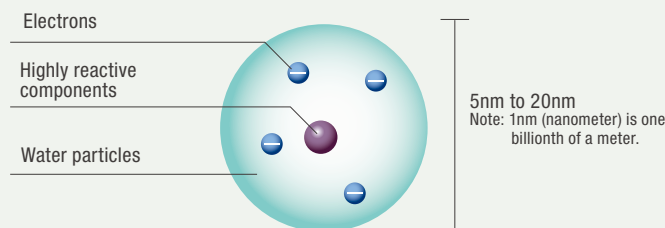
Option



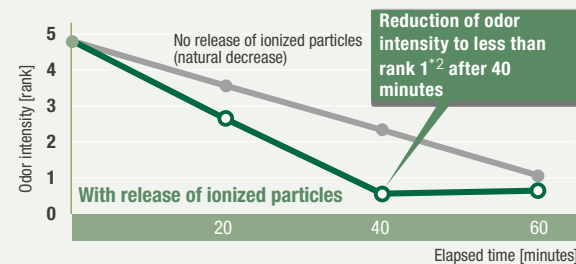
Note: Artist's conception.

Ion generator improves air quality

An ion generator manufactured in Japan is mounted on top of the car. Nano-sized electrostatic atomized water particles work to improve air quality.



Elevator interior deodorizing test^{*1}



^{*1} Results after 40 minutes in test performed in (13-passenger) elevator measuring approx. 5.5 m³. Results may differ from those in actual usage space.
^{*2} Odor strength rank 1 is defined as "extremely weak odor that is hardly noticeable."

Testing organization: Hitachi Power Solutions Co., Ltd.
 Testing method: Verification using six-rank odor intensity indication method in passenger elevator with 13-person capacity
 Deodorizing method: Release of ionized particles
 Subject: Methyl mercaptan was released and the change in its concentration was measured.

About ionized particles

The ionized particles released into the air come into contact with odor molecules and the OH radicals break down substances that cause odor.¹ Also, the ionized particles come into contact with allergens (pollen² and mites³), bacteria,⁴ and viruses,⁵ and the OH radicals denaturize their protein and suppress them.

1. Testing organization: Panasonic Corporation Product Analysis Center. Testing method: Direct exposure in 250-liter test space and verification using six-rank odor intensity indication method. Deodorizing method: Release of ionized particles. Subject: Accumulated cigarette odor. Test result: Odor intensity reduction of 0.8 after 30 minutes. Test number: E02-090313MH-01 2. Testing organization: Panasonic Corporation Product Analysis Center. Testing method: Direct exposure in 45-liter test space and measurement using ELISA method. Suppression method: Release of ionized particles. Subject: Allergen (pollen). Test result: Over 99% suppression after two hours. Test number: E02-080303IN-03 3. Testing organization: Panasonic Corporation Product Analysis Center. Testing method: Direct exposure in 45-liter test space and measurement using ELISA method. Suppression method: Release of ionized particles. Subject: Allergen (mites). Test result: Over 98% suppression after two hours. Test number: E02-080204IN-02 4. Testing organization: Kitasato Research Center for Environmental Science. Testing method: Direct exposure in 1-square-meter test vessel and measurement of bacteria count. Suppression method: Release of ionized particles. Subject: Airborne bacteria. Test result: Over 99% suppression after 20 minutes. Kitasato Biogenetic: 20_0154_1. Test performed for one type of bacteria only. 5. Testing organization: Kitasato Research Center for Environmental Science. Testing method: Direct exposure in 1-square-meter test vessel and measurement of virus count. Suppression method: Release of ionized particles. Subject: Airborne virus. Test result: Over 99% suppression after 90 minutes. Kitasato Biogenetic: 20_0154_1. Test performed for one type of virus only.

Note: The ionized particles suppress viruses, etc., but they are not guaranteed to prevent infection.
 Note: The ion generator is not available in the following cases:
 (1) When the ceiling is supplied by the customer.
 (2) When the car internal depth is 1,250mm or less.

Improved riding comfort

Standard

Measures such as control to suppress motor vibration and vibration-absorbing type guide shoes are utilized. These reduce noise and vibration when the elevator is in motion for a smooth and quiet ride.

Safety & Emergency

Door signal with multi-beam door sensor (The closing door alert)

Option

The door signal flashes to notify passengers when the door is starting to close

The multi-beam door sensor is backed by a door signal that notifies passengers when the door is going to close. The LED on the edge of the door starts to blink about one second before the door starts to close. If the door close button in the elevator car is pressed, the LED starts blinking at the same time as the door starts to close.

Door signal



Note: Illustration shows simulated view of beams.

Micro-leveling

Standard

Automatic correction of elevator landing level when there is a level difference between car and floor. This improves safety when getting on and off the elevator.

Automatic rescue device for power failure

Option

In a power failure, the elevator switches to battery operation, and moves to the nearest floor

When a power failure is detected, the drive power supply switches over to battery power, and the elevator automatically moves to the nearest floor and releases the passengers for safety. This lessens the worry of being shut in the elevator by a power outage in a building with no private generator equipment.



Ceiling designs (Silkscreen print)

Option

By applying silk screening to the ceilings of SL-11 and DX-101, Hitachi ceiling designs coordinate your elevator with the building decor.

SL-11^{*1}



SL-11-Oriental mosaic

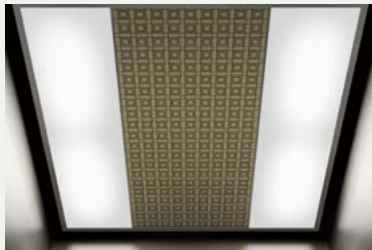


SL-11-Cube



SL-11-Kaleidoscope

DX-101^{*1}



DX-101-Lattice



DX-101-Geometric star



DX-101-Arabesque

^{*1} These ceilings are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.

Button designs

A wide range of buttons harmonizes with various building designs.

High-contrast plastic buttons

Standard

High-contrast and raised characters make numbers more legible. Button surfaces are rounded to make it easier to wipe them clean.



Stainless steel buttons

Option

Various stainless steel buttons are available.



Interphone button

Standard

Designed for easy use in an emergency.



In-car LCD indicator

Option

The LCD indicator makes it easy to find necessary information.

An in-car indicator with an 8.4-inch color LCD is available. The LCD with wide angle improves visibility. It displays indications of the operating status, such as earthquake emergency operation, to the user.



Black



Blue

Normal



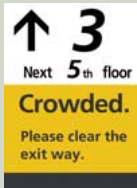
Floor indication



Overload



Door prolong^{*1}



When crowded

Emergency



Earthquake^{*1}



Power failure^{*1}



Fire emergency^{*1}



Emergency stop

^{*1} Display indications regarding operation during earthquakes, etc., require that the corresponding functions be installed.

Hall LCD indicator

Option

The hall LCD indicator displays abundant information in the hall.

A hall indicator with a 6.2-inch color LCD is available. Like the in-car LCD indicator, it displays indications of the operating status.



Earthquake^{*2}

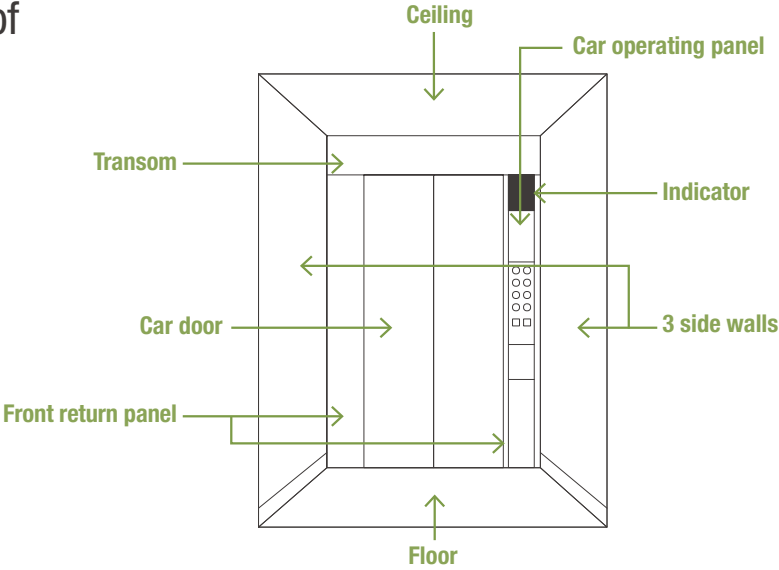


^{*2} Display indications regarding operation during earthquakes, etc., require that the corresponding functions be installed.

Recommended designs

Car designs

Choose from a wide range of design options to create an elevator look that matches your building.



Recommended designs

Samples of designs created by a designer.

Stylish design	Chic design	Luxurious Design
<ul style="list-style-type: none">OfficeCommercial building	<ul style="list-style-type: none">ResidenceHotel	<ul style="list-style-type: none">Commercial buildingHotel
 <p>Ceiling: SL-series (SL-11-Kaleidoscope)*¹ 3 side walls: Decorated steel (Minamo white) Car door: Decorated steel (Minamo white)</p>	 <p>Ceiling: SL-series (SL-12) 3 side walls: Decorated steel (Mocha wood) Car door: Decorated steel (Mocha wood)</p>	 <p>Ceiling: EX-series (EX-11)*¹ 3 side walls: Decorated steel (Craft wood) Car door: Stainless steel non-directional hairline</p>
 <p>Ceiling: DX-series (DX-101-Lattice)*¹ 3 side walls: Colored stainless steel hairline Car door: Colored stainless steel hairline</p>	 <p>Ceiling: DX-series (DX-11) 3 side walls: Laminated plastic sheet (5261NT)*¹ Car door: Colored stainless steel hairline</p>	 <p>Ceiling: DX-series (DX-104) 3 side walls: Decorated steel (Mocha wood) Car door: Colored stainless steel hairline</p>

*1 These ceilings and LPS are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.



Stylish design (for office)

Specifications	
Ceiling	SL-series (SL-11-Kaleidoscope)* ¹
3 side walls	Decorated steel (Minamo white)
Car door	Decorated steel (Minamo white)
Front return panel/Transom	Stainless steel hairline
Floor	Vinyl tile (GA204)* ¹
Indicator	LCD (8.4 inches)
Car operating panel	Stainless steel hairline

*1 These ceilings and tiles are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.
Note: Illustrations show simulated views of elevator interiors. Actual illumination brightness and colors may differ.



Stylish design (for commercial building)

Specifications	
Ceiling	DX-series (DX-101-Lattice)*1
3 side walls	Colored stainless steel hairline
Car door	Colored stainless steel hairline
Front return panel/Transom	Stainless steel mirror
Floor	Vinyl tile (SA614)*1
Indicator	LCD (8.4inches)
Car operating panel	Stainless steel mirror

*1 These ceilings and tiles are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.
Note: Illustrations show simulated views of elevator interiors. Actual illumination brightness and colors may differ.



Chic design (for residential building)

Specifications	
Ceiling	SL-series (SL-12)
3 side walls	Decorated steel (Mocha wood)
Car door	Decorated steel (Mocha wood)
Front return panel/Transom	Stainless steel hairline
Floor	Vinyl tile (GA205)*1
Indicator	LCD (8.4 inches)
Car operating panel	Stainless steel hairline



Chic design (for hotel)

Specifications	
Ceiling	DX-series (DX-11)
3 side walls	Laminated plastic sheet(5261NT)*1
Car door	Colored stainless steel hairline
Front return panel/Transom	Colored stainless steel hairline
Floor	Vinyl tile (SA605)*1
Indicator	LCD (8.4 inches)
Car operating panel	Colored stainless steel hairline

*1 These tiles and LPS are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.
Note: Illustrations show simulated views of elevator interiors. Actual illumination brightness and colors may differ.



Luxurious design (for commercial building)

Specifications	
Ceiling	EX-series (EX-11)* ¹
3 side walls	Decorated steel (Craft wood)
Car door	Stainless steel non-directional hairline
Front return panel/Transom	Stainless steel non-directional hairline
Floor	Vinyl tile (SA614)* ¹
Indicator	LCD (8.4 inches)
Car operating panel	Stainless steel non-directional hairline

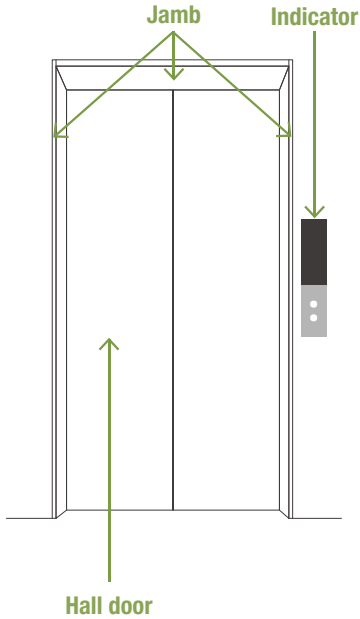


Luxurious design (for hotel)

Specifications	
Ceiling	DX-series (DX-104)
3 side walls	Decorated steel (Mocha wood)
Car door	Colored stainless steel hairline
Front return panel/Transom	Colored stainless steel hairline
Floor	Vinyl tile (GA204)* ¹
Indicator	LCD (8.4 inches)
Car operating panel	Colored stainless steel hairline

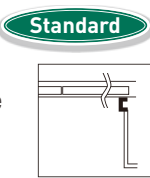
*¹ These ceilings and tiles are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.
Note: Illustrations show simulated views of elevator interiors. Actual illumination brightness and colors may differ.

Hall designs



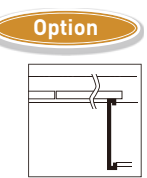
AS-1X (2PCO)

Jamb: Stainless steel hairline
Hall door: Stainless steel hairline
Indicator: Dot-matrix



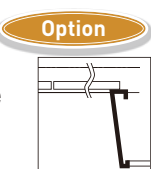
SS-1X (2PCO)

Jamb: Stainless steel hairline
Hall door: Stainless steel hairline
Indicator: Dot-matrix



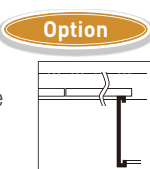
TS-1X (2PCO)

Jamb: Stainless steel hairline
Hall door: Stainless steel hairline etching (SD-1038)
Indicator: LCD



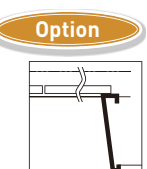
SL-2X (2PCO)

Jamb: Stainless hairline
Hall door: Stainless steel hairline
Indicator: LCD



TL-2X (2PCO)

Jamb: Stainless steel hairline
Hall door: Stainless steel hairline
Indicator: LCD



Note: Illustrations show simulated views of elevator interiors. Actual illumination brightness and colors may differ.

Ceilings and Handrails

Ceilings Standard

Standard

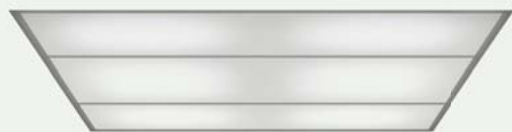
BS-11^{*1} **Center:** Milky white acrylic^{*2}
Surrounding: Decorated steel(White)



Select

Option

SL-11^{*1} **Entire surface:** Milky white acrylic
Surrounding: Extruded aluminum



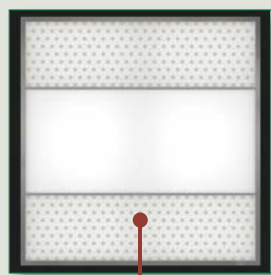
SL-12 **Entire surface:** Painted steel(White)
Illumination slits: Painted steel (Black)
Surrounding: Extruded aluminum



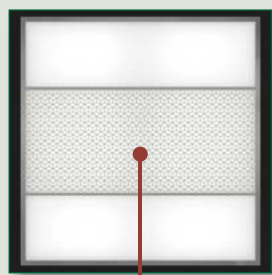
Variation of SL-11

Silkscreen print

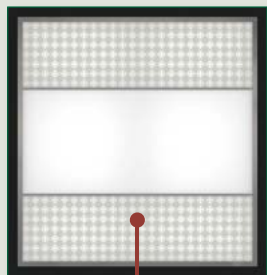
Option



SL-11-Oriental mosaic^{*1}



SL-11-Cube^{*1}



SL-11-Kaleidoscope^{*1}

^{*1} These ceilings are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.
^{*2} For some car sizes there are two milky white acrylic options.
Note: It is also possible to use ceiling materials supplied and installed by the customer.
Note: Depending on applicable regulations, car top emergency trap door may be required.

Deluxe

Option

DX-101^{*1}

Center: Painted steel(White)
Both side: Milky white acrylic
Surrounding: Extruded aluminum



DX-11

Center: Painted steel(White)
Indirect lighting
Both side: Painted steel(White)
Down light
Surrounding: Extruded aluminum



DX-104

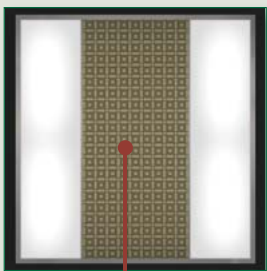
Entire surface: Painted steel (Black)
Down light
Trim: Stainless steel



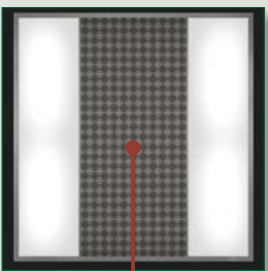
Variation of DX-101

Silkscreen print

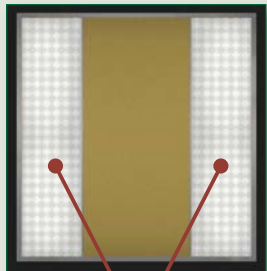
Option



DX-101-Lattice^{*1}



DX-101-Geometric star^{*1}



DX-101-Arabesque^{*1}

Premium

Option

EX-11^{*1} **Entire surface:** Glass fiber cloth



^{*1} These ceilings are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.
Note: It is also possible to use ceiling materials supplied and installed by the customer.
Note: Depending on applicable regulations, car top emergency trap door may be required.

Handrails

Option



Round pipe type
(stainless steel hairline)
Diameter: 32mm



Flat type
(Aluminum)
Width: 90mm



Flat type
(stainless steel hairline)
Width: 90mm



Flat type
(stainless steel hairline)
Width: 50mm


Note: Illustrations show simulated views of handrail designs. Actual illumination brightness and colors may differ.

Operating panels and indicators

Car operating panels


Stainless steel cover plate

Indicator type (dot-matrix) **Standard**



OPV/D


Indicator type (LCD) **Option**



OPV/L

Car position indicators (LCD) **Option**

In addition to the standard white, you can select black or blue as the background color.




White (standard color) Black Blue


Horizontal operating panels **Option**

Stainless steel cover plate


Without indicator




With indicator



For wheelchair use




For wheelchair use




Car button types

Plastic **Standard**




P14F-UL

Stainless steel hairline **Option**

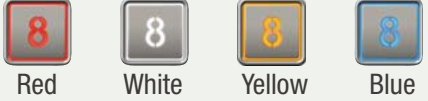


UB15R-1 UB15R-2 UB15R-3 UB15R-4



UB15S-1 UB15S-2 UB15S-3 UB15S-4


Illumination colors^{*1}



Red White Yellow Blue

The car operating panel is installed on the side panel in the following cases:

- Front panel width: Less than 300mm (number of stop floors: 24 or fewer)
- Front panel width: Less than 370mm (number of stop floors: 25 or more)




OPW/D OPW/L

Hall operating panels


Stainless steel cover plate

Incorporated type (dot-matrix) **Standard**




VIB-14B/D

Incorporated type (LCD) **Option**




VIB-14B/L

Separate type **Option**



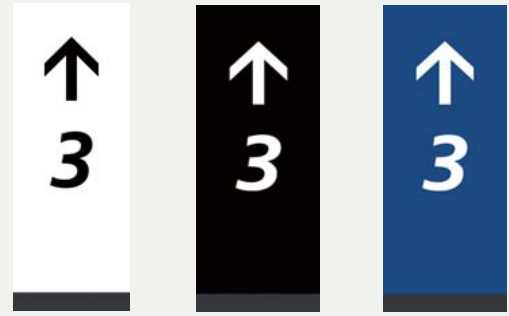
HBC

Separate type (for wheelchair use) **Option**



Car position indicators (LCD) **Option**

In addition to the standard white, you can select black or blue as the background color.




White (standard color) Black Blue

Horizontal indicators **Option**


Stainless steel cover plate

Dot-matrix



HF-119

LCD^{*1}



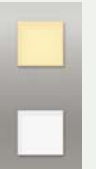
HF-CL11

Hall button types

Hall lanterns **Option**


Stainless steel cover plate

Square lanterns (LED)




HLC-304^{*2}

Round lanterns (LED)




HLC-303^{*2}

Triangle lanterns (horizontal type) (LED)




HLS-025S2

Triangle lanterns with dot-matrix indicator (LED)




HLS-025SD2

Plastic **Standard**




P14F-UL

Stainless steel hairline **Option**

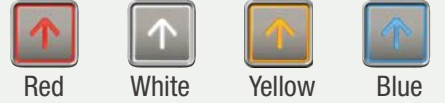


UB15R-1 UB15R-2 UB15R-3 UB15R-4



UB15S-1 UB15S-2 UB15S-3 UB15S-4

Illumination colors^{*3}



Red White Yellow Blue

^{*1} LCD back light can be changed to black or blue.
^{*2} Stainless steel non-directional hairline cover is available (Option).
Lantern illumination color can be changed to white.
^{*3} Illustrations colors are only applicable for stainless steel hairline buttons.

Materials



Hall		Car			
Jamb	Door	Door	3 side walls	Front wall	Transom
Stainless steel <div> <div>Standard</div> <div>Option</div> <div>Option</div> </div> <div> <div>Hairline^{*1}</div> <div>Non-directional hairline</div> <div>Mirror</div> </div>		Colored stainless steel <div>Option</div> <small>* Colored stainless steel is available for hairline and mirror options.</small> <div> <div>Gold</div> <div>Bronze</div> <div>Black</div> </div>			
		Stainless steel hairline etching and mirror etching <div>Option</div> <div> <div>SD-1006</div> <div>SD-1010</div> <div>SD-1026</div> <div>SD-1031</div> <div>SD-1036</div> <div>SD-1038</div> <div>SD-1046</div> <div>SD-1051</div> <div>SD-1056</div> <div>SD-1059</div> </div> <div> <div>Etched area</div> <div>Non etched area</div> </div>			
		Decorated steel <div>Option</div> <div> <div>Minamo white</div> <div>Craft wood</div> <div>Mocha wood</div> </div>			
		Laminated plastic sheet (LPS)^{*2} <div>Option</div> <div> <div>7170UN Metal Pearl Rosewood</div> <div>2726NT Natural Beech</div> <div>5261NT Sandy Sakura</div> <div>5474UN Silverbrush Wood-Cross</div> <div>5475SP Blondbrush Wood-Cross</div> <div>7171UN Metal Pearl Steel</div> <div>7158UN Cosmic Dusk</div> <div>7157UN Cosmic Dawn</div> <div>0869NT Powdered Oak</div> <div>8834NT Smoke Strand</div> <div>6006UN Canadian Pine (Straight)</div> </div>			

Floor

Vinyl tile^{*1} <div> <div>GA 201</div> <div>GA 202</div> <div>GA 204</div> <div>GA 205</div> <div>SA 605</div> <div>SA 606</div> <div>SA 614</div> </div>			
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^{*1} These tiles are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.
Note: It is also possible to use floor materials supplied by the customer.

^{*1} SUS430(Standard), SUS304(Option)
^{*2} LPS is not compliant with EN81-20/50 and SS550. In case of EN81-20/50, it can be used if the customer agrees.
Note: The colors printed in the catalog may differ slightly from the actual colors.

Design variations

Car design variations

● : Standard, ◎ : Option

No.	Item			Finishes/Types	Passenger Service
1	Ceiling* ¹			Standard (BS-11)* ²	●
2				Select (SL-11)* ² (SL-11-Oriental mosaic)* ² (SL-11-Cube)* ² (SL-11-Kaleidoscope)* ² (SL-12)	◎
3				Deluxe (DX-101)* ² (DX-101-Lattice)* ² (DX-101-Geometric star)* ² (DX-101-Arabesque)* ² (DX-11) (DX-104)	◎
4				Premium (EX-11)* ²	◎
5	Car door/3 side walls			Stainless steel hairline	●
6				Colored stainless steel hairline (Gold, Bronze, Black)	◎
7				Stainless steel hairline etching	◎
8				Colored stainless steel hairline etching (Gold, Bronze, Black)	◎
9				Stainless steel mirror	◎
10				Colored stainless steel mirror (Gold, Bronze, Black)	◎
11				Stainless steel mirror etching	◎
12				Colored stainless steel mirror etching (Gold, Bronze, Black)	◎
13				Stainless steel non-directional hairline	◎
14				Decorated steel* ³	◎
15				Laminated plastic sheet* ⁴ * ⁵ (7170UN)(2726NT) (5261NT) (5474UN) (5475SP)(7171UN) (7158UN) (7157UN) (0869NT)(8834NT) (6006UN)	◎
16				Rust proof painted steel	◎
17	Front wall and transom			Stainless steel hairline	●
18				Colored stainless steel hairline (Gold, Bronze, Black)	◎
19				Stainless steel hairline etching	◎
20				Colored stainless steel hairline etching (Gold, Bronze, Black)	◎
21				Stainless steel mirror	◎
22				Colored stainless steel mirror (Gold, Bronze, Black)	◎
23				Stainless steel mirror etching	◎
24				Colored stainless steel mirror etching (Gold, Bronze, Black)	◎
25				Stainless steel non-directional hairline	◎
26				Decorated steel	◎
27				Rust proof painted steel	◎
28	Kick plate			Stainless steel hairline	●
29				Stainless steel non-directional hairline	◎
30	Sill			Extruded hard aluminum	●
31				Stainless steel	◎
32	Floor* ¹ * ⁵			Vinyl tile (GA201) (GA202) (GA204) (GA205) (SA605) (SA606) (SA614)	●
33	Handrail	Round type	Stainless Steel hairline	Diameter:32mm(one row)	◎
34		Flat type	Stainless Steel hairline	Width:50mm(one row)	◎
35				Width:90mm(one row)	◎
36			Aluminum	Width:90mm(two rows)	◎
37				Width:90mm(one row)	◎
38				Width:90mm(two rows)	◎
39	Car operating panel	Vertical* ⁶		Dot-matrix indicator (OPV/D)	●
40				LCD indicator (OPV/L) (White, Black, Blue)	◎
41		Horizontal		Without indicator	◎
42				Dot-matrix indicator	◎
43		Horizontal for wheelchair		Without indicator	◎
44				Dot-matrix indicator	◎
45	Car operating panel cover plate			Stainless steel hairline	●
46				Stainless steel mirror	◎
47				Stainless steel non-directional hairline	◎
48	Button type			Plastic (P14F-UL)	●
49				Stainless steel hairline* ⁷ (UB15R-1) (UB15R-2) (UB15R-3) (UB15R-4) (UB15S-1) (UB15S-2) (UB15S-3) (UB15S-4)	◎

*1 It is also possible to use materials supplied and installed by the customer.
*2 These ceilings are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.
*3 Decorated steel is available in the following cases:
(1) Ceiling height (CH) with respect to each ceiling type:
BS-11, BY OTHERS: CH ≤ 2,300mm
SL-11, 12, DX-11, 101: CH ≤ 2,250mm
DX-104, EX-11: Not available
(2) Entrance height (EH) ≤ 2,100mm
*4 LPS comes with stainless steel hairline trim edge.
*5 These tiles and LPS are not compliant with EN81-20/50 and SS550. In case of EN81-20/50, they can be used if the customer agrees.
*6 Depending on size of car, may be mounted on side wall.
*7 The available button illumination colors are yellow, red, white, and blue.

Hall design variations

● : Standard, ◎ : Option

No.	Item		Finishes/Types	Passenger Service	
1	Jamb type		AS-1X	●	
2			SS-1X	◎	
3			TS-1X	◎	
4			SL-2X	◎	
5			TL-2X	◎	
6	Jamb finish		Stainless steel hairline	●	
7			Colored stainless steel hairline	◎	
8			Stainless steel mirror	◎	
9			Colored stainless steel mirror	◎	
10			Stainless steel non-directional hairline	◎	
11			Rust proof painted steel	◎	
12	Transom finish		Stainless steel hairline	●	
13			Colored stainless steel hairline (Gold, Bronze, Black)	◎	
14			Stainless steel hairline etching	◎	
15			Colored stainless steel hairline etching (Gold, Bronze, Black)	◎	
16			Stainless steel mirror	◎	
17			Colored stainless steel mirror (Gold, Bronze, Black)	◎	
18			Stainless steel mirror etching	◎	
19			Colored stainless steel mirror etching (Gold, Bronze, Black)	◎	
20			Stainless steel non-directional hairline	◎	
21			Rust proof painted steel	◎	
22	Hall door		Stainless steel hairline	●	
23			Colored stainless steel hairline (Gold, Bronze, Black)	◎	
24			Stainless steel hairline etching	◎	
25			Colored stainless steel hairline etching (Gold, Bronze, Black)	◎	
26			Stainless steel mirror	◎	
27			Colored stainless steel mirror (Gold, Bronze, Black)	◎	
28			Stainless steel mirror etching	◎	
29			Colored stainless steel mirror etching (Gold, Bronze, Black)	◎	
30			Stainless steel non-directional hairline	◎	
31			Laminated plastic sheet*1*2 (7170UN) (2726NT) (5261NT) (5474UN) (5475SP) (7171UN) (7158UN) (7157UN) (0869NT) (8834NT) (6006UN)	◎	
32	Rust proof painted steel	◎			
33	Sill		Extruded hard aluminum	●	
34			Stainless steel	◎	
35	Hall button cover plate		Incorporated indicator	●	
36			Stainless steel mirror	◎	
37			Stainless steel non-directional hairline	◎	
38			Separate indicator	Stainless steel hairline	◎
39				Stainless steel mirror	◎
40				Stainless steel non-directional hairline	◎
41	Hall button cover plate for wheelchair use		Incorporated indicator	◎	
42			Stainless steel mirror	◎	
43			Stainless steel non-directional hairline	◎	
44			Separate indicator	Stainless steel hairline	◎
45				Stainless steel mirror	◎
46	Stainless steel non-directional hairline	◎			
47	Indicator		Vertical	●	
48			LCD (White, Black, Blue)	◎	
49			Horizontal	Dot-matrix (HF-119)	◎
50				LCD (HF-CL11) (White, Black, Blue)	◎
51	Horizontal indicator cover plate		Stainless steel hairline	◎	
52			Stainless steel mirror	◎	
53			Stainless steel non-directional hairline	◎	
54	Button type		Plastic (P14F-UL)	●	
55			Stainless steel hairline*3 (UB15R-1) (UB15R-2) (UB15R-3) (UB15R-4) (UB15S-1) (UB15S-2) (UB15S-3) (UB15S-4)	◎	
56	Lantern		Vertical	◎	
57			Square lanterns (HLC-304) (Orange, White)	◎	
58			Round lanterns (HLC-303) (Orange, White)	◎	
59			Horizontal	Triangle lanterns (HLS-025S2)	◎
60	Triangle lanterns with dot-matrix indicator (HLS-025SD2)	◎			
61	Lantern cover plate		Stainless steel hairline	◎	
62			Stainless steel mirror	◎	
62			Stainless steel non-directional hairline	◎	

*1 LPS comes with stainless steel hairline trim edge.
*2 LPS cannot be used in the landing area when fire rated doors are selected.
*3 The available button illumination colors are yellow, red, white, and blue.

Functions

● : Standard, ◎ : Option

No.	Name		Description	Passenger Service
Operating systems				
1	Simplex collective control		This is a fully automatic operation used for a single elevator system. Hall calls in the direction in which the elevator is travelling are responded to sequentially and when all calls in that direction are cleared, calls in the opposite direction are responded to. When there are no more calls, the elevator will stop at the last floor served.	●
2	Duplex collective control		This is a fully automatic operation used for a two-elevator system. Hall calls are responded to by whichever elevator that can serve the hall call faster. When there are no more calls, one of the elevators will stand by at the stand by floor while the other elevator will stay at the last floor served.	◎
3	Group control	FIBEE	Allows the passenger to preselect the destination floor on the destination floor panel installed at the landing hall. This reduces button operations to one, improving the operability.	◎
4		FI-10	This is a simplified group control system used to operate three or four elevators. The system provides a ring control to allocate the elevator car closed to the floor where a new hall call is registered.	◎
5		FI-100	This is a group control system used to operate three to six elevators in a medium-sized building. This control system uses “reference-trajectory control”, which is based on the theory used in the highest model of the “future reference-trajectory control”.	◎
6		FI-600	This is a group control system used to operate three to eight elevators in a large-sized building. This control system consists of three smart systems; “future reference-trajectory control”, “learning system” and “intelligent system”.	◎
7	Down collective control		For this system, all floors have “down” call buttons only, except for the stand by floor, where there is “up” call button only. The other operations are the same as in selective-collective and duplex selective-collective operations.	◎
Service functions				
1	Automatic return function		After all the calls have been served, the elevator will return to the stand by floor for stand by.	◎*1
2	Attendant operation		For this system, the stop floor is manually set by an attendant, such as in a department store.	◎
3	Independent operation		This operation system is used when there is a need to serve special passengers. Under this operation, all hall calls are disabled for the elevator and it is reserved for exclusive use of the special passengers.	◎
4	Parking operation		The elevator can be parked at the parking floor by a key switch.	◎*2
5	Rush-hour schedule operation		All the elevators will automatically return to the stand by floor, after serving the last call during this preset rush-hour timing.	◎
6	Homing operation*3		When a dedicated button is pressed, the other registered destinations are cancelled and the elevator goes directly to the specified floor. This is useful in hospitals, etc., when it is necessary to use the elevator in an emergency.	◎
7	Separated simplex operation		When duplex collective control or group control is used, a selector switch on the control panel is used to switch between parallel operation and independent operation.	◎
8	Interphone system		An interphone system is provided for emergency communication between the elevator and the master unit in the supervisory panel, etc.	●
9	Floor lock-out operation		Specific service floors can be locked-out by activating a switch.	◎
10	Temporary call registration of certain restricted floor		By inputting a pre-programmed code using the car operating board floor buttons, passengers can gain access to certain restricted floors.	◎
11	Door nudging operation		When the door has been open for a certain period of time, a buzzer sounds and the door forcibly closes.	◎

*1 Included in the standard configuration when duplex collective control or group control are selected.
*2 Included in the standard specifications for Thailand, Laos, Myanmar, and Cambodia.
*3 Available for Hong Kong only.

● : Standard, ◎ : Option

No.	Name	Description	Passenger Service
Safety functions			
1	Abnormal speed protection function	In the event that the elevator is moving downwards at an abnormally high speed, the brakes will be automatically engaged and the elevator will cease operation.	●
2	Out of door-open zone alarm	In the event that the elevator stops out of the door-open zone of a selected floor, doors will not open, and an alarm will be sounded in the elevator.	●
3	Rescue operation	When the elevator stops out of the door-open zone, it will move to the nearest floor at slow speed to release passengers.	●
4	Door safety return system	In the event of door overload, such as when passengers get their fingers, hands or personal belongings caught in the door, this system automatically senses this and either re-closes or re-opens the doors to prevent injury.	●
5	Micro-leveling	Automatic correction of elevator landing level when there is a level difference between car and floor.	●
6	Car emergency lighting	In the event of a power failure, an emergency light inside the elevator will be automatically activated.	●
7	Emergency battery	In the event of a power failure, this emergency supply allows the operation of a light, fan and alarm bell.	◎
8	Multi-beam door sensor	In the event that the beam paths are obstructed, this sensor, installed at the edge of the doors, will keep the doors open.	●
9	Door signal with multi-beam door sensor	In addition to the multi-beam door sensor, the safety shoe is equipped with a signal that indicates when the doors are starting to close. (2PCO : Both side, 2S2P : One side)	◎
10	Door safety edge	Mechanical safety units are installed on both sides (2PCO) or one side (2S2P) of the elevator doors. In the event of passengers coming into contact with the safety edges of closing doors, the doors will immediately reopen.	◎
Accessibility			
1	Car floor button flashing	The registered car destination floor button flashes when the car approaches the floor.	●
2	Braille plate	Braille plates are fixed next to the operation buttons in the car and hall.	◎
3	Sound button	An electronic tone sounds when the buttons are pressed to confirm call registration.	◎
Security functions			
1	Intelligent operation security system by card reader (By others)	This function allows controlled access to certain floors by means of a password or ID cards. Note: Keypad or ID card-reader system is to be provided and installed by others. Interfacing shall be by means of dry (voltage-free) contacts.	◎
2	CCTV(camera by others, coaxial cable by Hitachi)	This system enables the security personnel to monitor inside the elevator car. This will be effective in preventing criminal and mischievous acts inside the elevator car. (CCTV system, including wiring, is to be supplied by others.)	◎
Information functions			
1	IC auto announcement (English / Thai / Malay / Mandarin / Cantonese / Portuguese)	Preset standard messages are announced to the passengers.	◎
2	Public address speaker	A speaker for background music and public announcements for the building can be installed in the elevator. (Music and announcement systems, including wiring, is to be provided by others)	◎
3	Arrival audio signal	An electrical chime (located at the top and bottom of the elevator) will sound just before the arrival of the elevator.	◎
Energy-saving functions			
1	Regenerative system	When traveling downwards with a heavy car load or upwards with a light car load, the traction machine acts as a power generator to transmit power back to the electrical network in the building.	◎
2	Automatic turn-off of elevator light and fan	In the event that the elevator is not in use, the light and ventilation fan in the elevator are automatically turned off to conserve energy.	●

● : Standard, ○ : Option

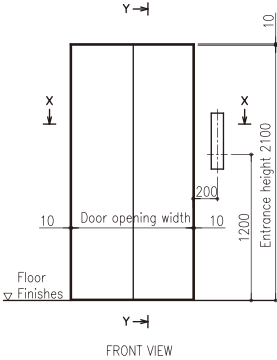
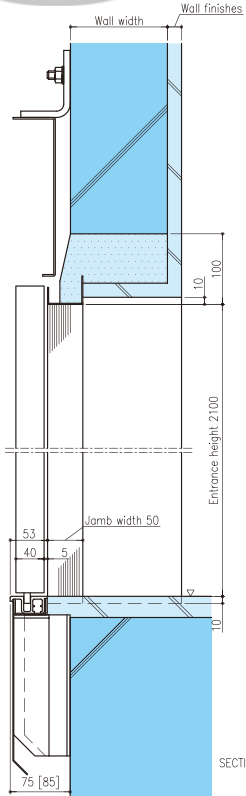
No.	Name	Description	Passenger Service
User services			
1	Observation	The walls of the elevator are equipped with windows, giving the elevator interior a more open feel.	○
2	Door open time adjustment	The duration of the door open timing is tailored to usage conditions, substantially improving operational efficiency.	●
3	Door open prolong button	In the event that this button on the car operation board is pressed, the elevator doors remain open for a pre-set period of time.	○
4	Automatic bypass operation	In the event that the elevator is fully loaded, this operation will not respond to any hall calls and will only respond to the car calls.	○
5	Mischievous call cancellation	In the event that a large number of calls is registered by a small number of passengers, the calls are determined to be mischievous and will be automatically cancelled upon responding to the next call. This eliminates unnecessary stops.	●
6	Floor "deselect "function	This function allows passengers to cancel the selection of a floor which is accidentally pressed by pressing the button again. (This eliminates unnecessary stops.)	●
7	Supervisory panel	This panel provides various supervisory operations, including communication and status monitoring.	○
8	Elevator monitoring system (EMS)	This system shows the real time situation of the elevators such as the elevator position, movement direction and abnormal operation on the PC (Personal Computer) display. It is also possible to turn on/off the elevators and change the service floors of the elevators using the PC.	○
9	Ion generator*1	A device that generates ionic microparticles enclosed in water is mounted on top of the car to ensure pleasant air quality inside the elevator.	○
10	Air conditioner	An evaporative-type cooling unit eliminates the need for pit drainage. This enhances comfort inside the elevator.	○
Emergency operations			
1	Earthquake emergency operation	In the event that an earthquake is detected, the elevator will stop at the nearest floor.	○
2	Earthquake emergency operation with primary wave sensor	When primary wave of an earthquake are detected, the elevator moves to the nearest floor and stops.	○
3	Fire emergency operation	In the event of fire, the elevator is automatically brought to the designated floor where it remains inoperative for passengers' safety.	○
4	Automatic rescue device for power failure	In the event of power failure, this system automatically switches to battery power to bring the elevator to the nearest floor.	○
5	Emergency operation for power failure	In the event of building power failure, the elevator can be operated by the building standby generator to move the elevator to the designated floor. (Automatic / Automatic and manual)	○
6	Pit flood operation	Elevator operation is paused when pit flooding is detected.	○
7	Fireman operation	In the event that the fireman switch is turned on, the elevator returns to the designated floor and will be ready for firemen's use.	○
Other functions			
1	Counterweight safety	A safety device is installed on the counterweight to maintain the rails and prevent falling.	○
2	Through door	Doors are installed on both sides of the elevator.	○
3	Freight condition of service lift	The elevator floor is reinforced to enable it to accommodate a larger volume of freight at once.	○
4	Over voltage detection device	When an abnormal increase in power supply to the elevator system is detected, the power supply will be cut off to prevent damages to the elevator equipment.	○
5	Maintenance operation	Elevator operates at lower speed during maintenance.	●
6	Overload detection system	In the event of overloading, this system will activate an audio/ visual signal to prevent the elevator from moving.	●
7	Nearest landing door operation	In the unlikely event of temporary trouble during operation, the elevator automatically goes to the nearest floor at a low speed and doors will open to prevent passengers from being trapped inside.	●
8	Hook for protection sheet	The side walls are equipped with hooks to facilitate mounting of protective mats.	○
9	Checker plate	A steel plate is affixed to the floor of the elevator.	○
10	Protection plate (stainless steel hairline) (H=300mm)	Protective stainless steel plates are installed to protect the area extending upward 300 mm from the bottom edge of three-side walls in car.	○
11	Protection plate (stainless steel hairline) (H=1200mm)	Protective stainless steel plates are installed to protect the area extending upward 1,200 mm from the bottom edge of three-side walls in car.	○
12	Sub-operating panel	Additional floor selection and door open/close buttons are located on the side opposite the main operating panel.	○
13	Keypad sub car-operating board	In order to comply with the barrier-free code, especially for high-rise buildings, individual car call buttons can be replaced by a keypad system.	○
14	Fire rated door	2 hours fire rated landing doors are available where required	○
15	Emergency landing door	If there is a long distance between floors, doors are installed in a location where the elevator can stop automatically in an emergency.	○
16	Switch for emergency exit	A switch stops the elevator when the emergency exit door is opened.	○
17	Switch for door-machine inspection opening	A switch stops the elevator when the door of the door-machine inspection opening is opened.	○
18	Painted equipment inside hoistway	Equipment in the hoistway is painted black.	○
19	Electromagnetic compatibility (EMC)	Electromagnetic compatibility function due to EN81-20/50 regulation, etc.	○
20	Interfacing to building management system	This interfacing shall be done by means of electrical dry contact to the building management system for their monitoring.	○

*1 The ion generator is not available in the following cases:
(1) When the ceiling is supplied by the customer.
(2) When the car internal depth is 1,250mm or less.

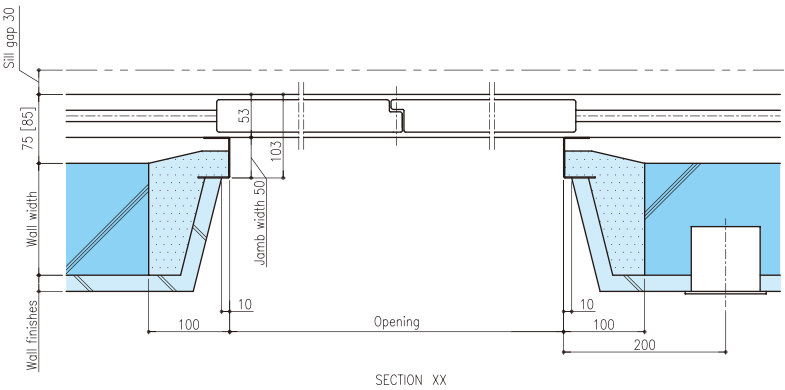
Dimensions

- Building structure (by other contractors)
- Wall and floor finishing (by other contractors)
- Grouting (by other contractors)

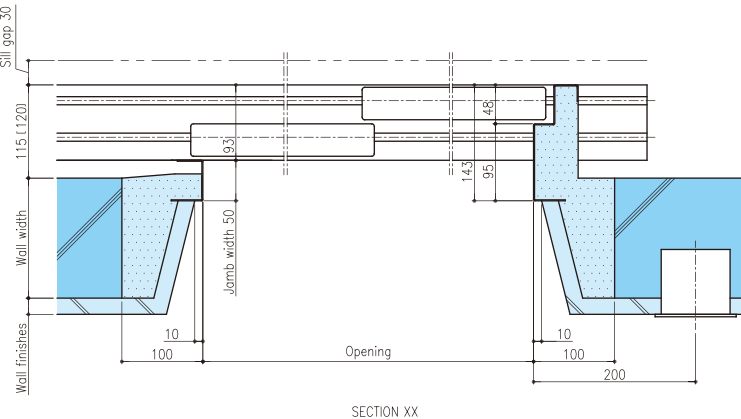
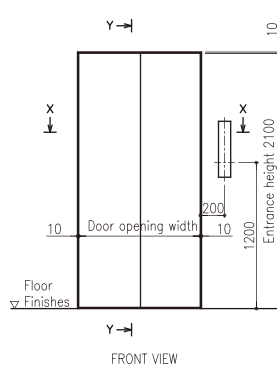
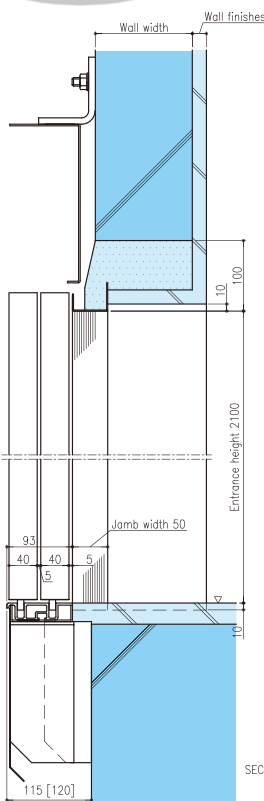
AS-1X (2PC0) Standard



(unit: mm)



AS-1X (2S2P) Standard

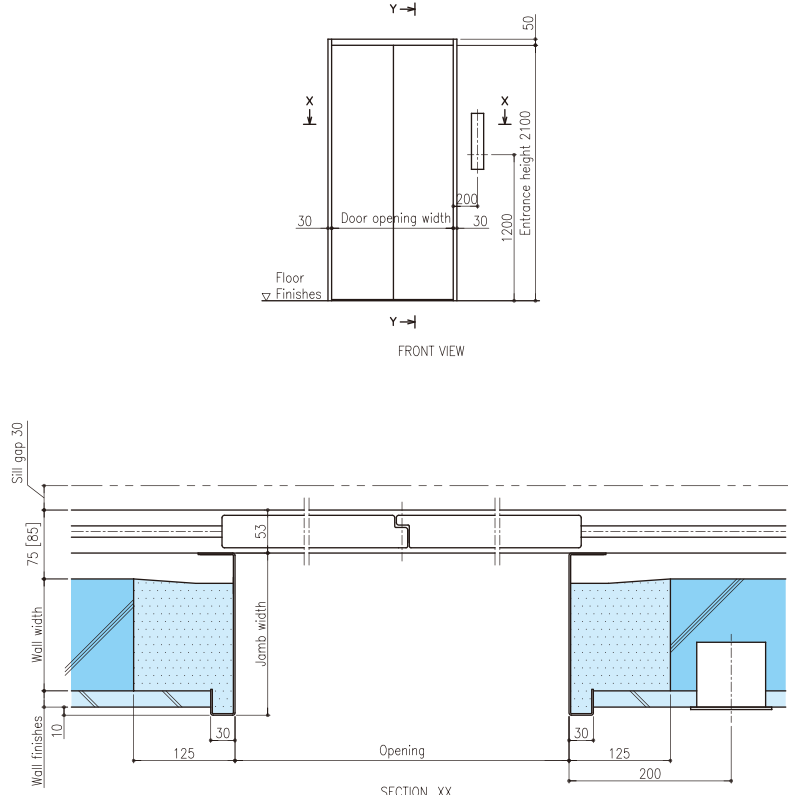
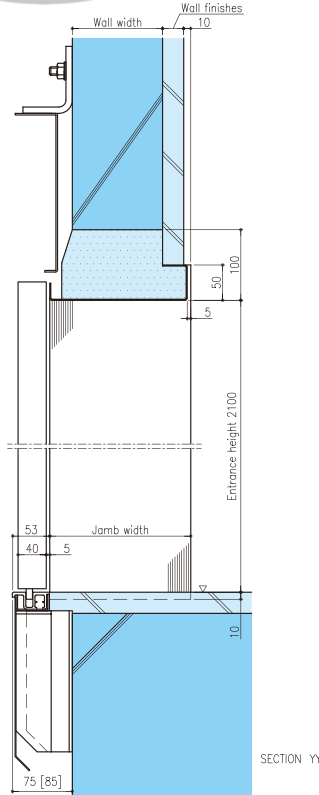


Note: [] : With fire rated door

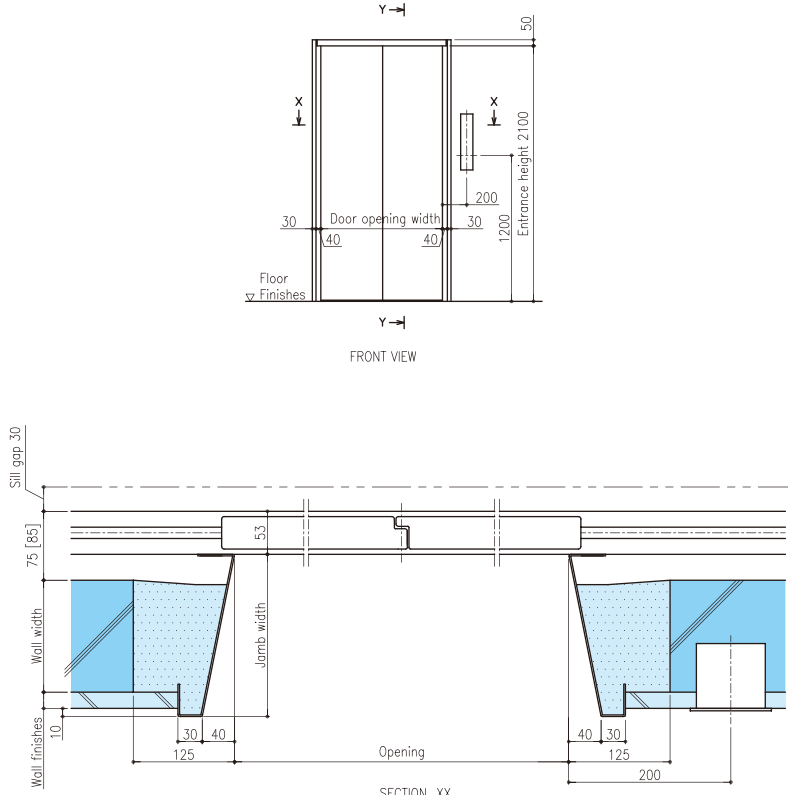
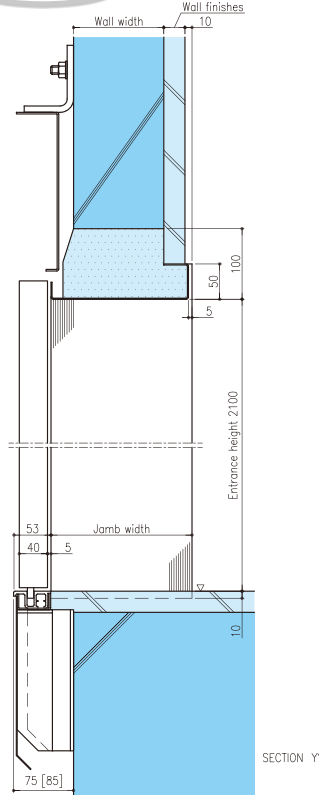
Dimensions

- Building structure (by other contractors)
- Wall and floor finishing (by other contractors)
- Grouting (by other contractors)

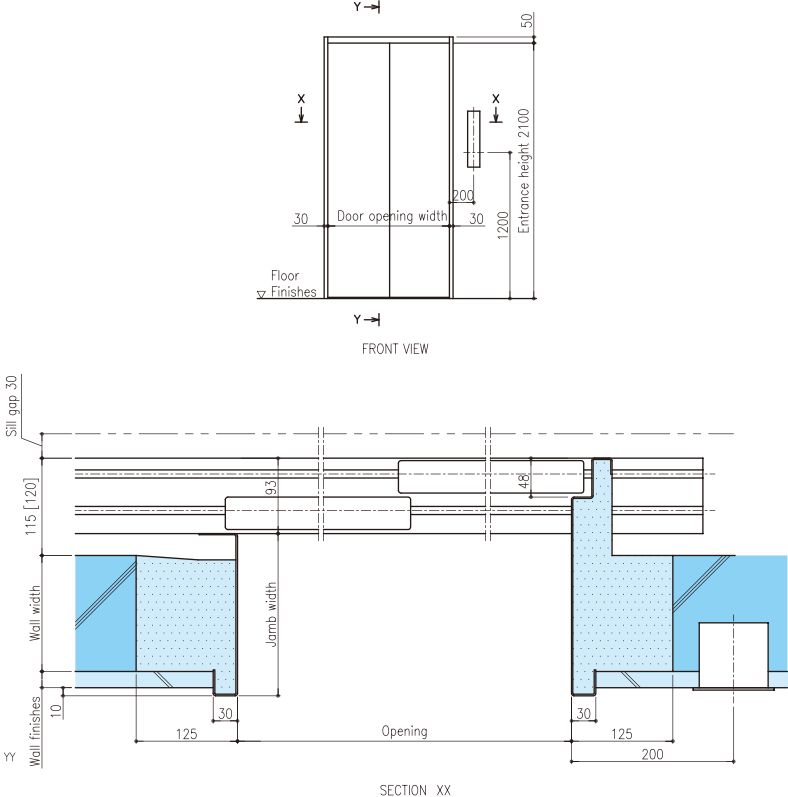
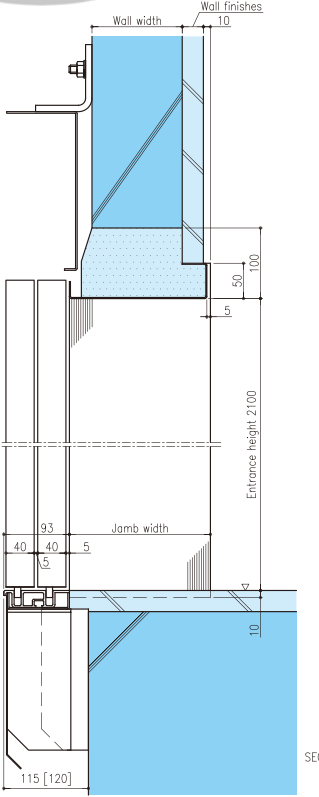
SS-1X(2PC0) Option



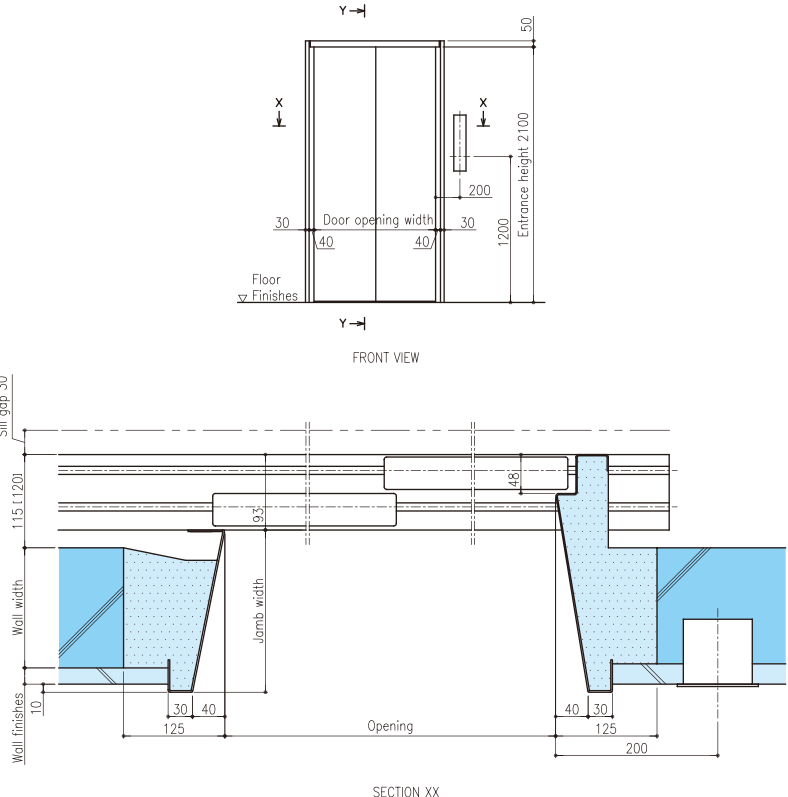
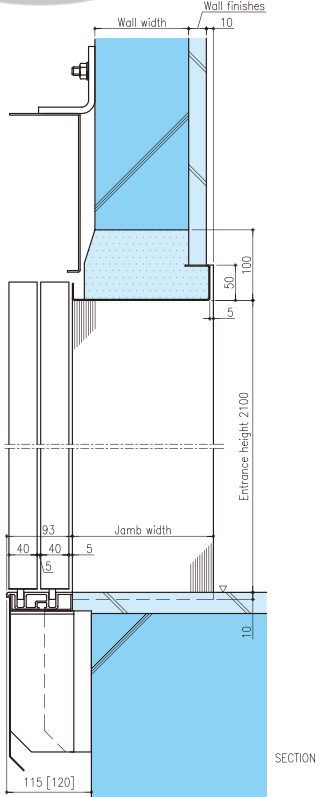
TS-1X(2PC0) Option



SS-1X(2S2P) Option



TS-1X(2S2P) Option



Note: [] : With fire rated door

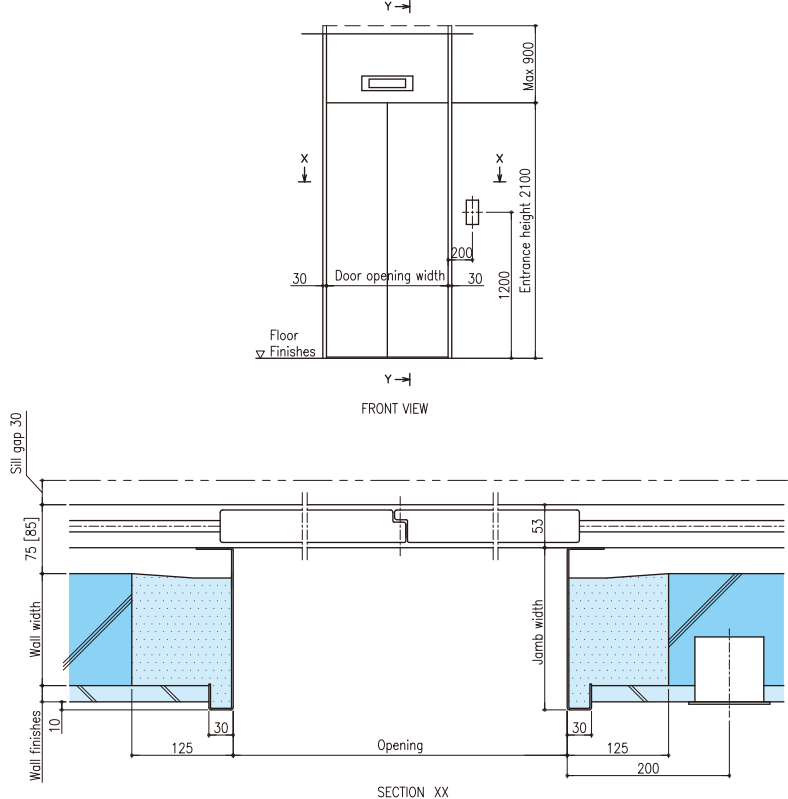
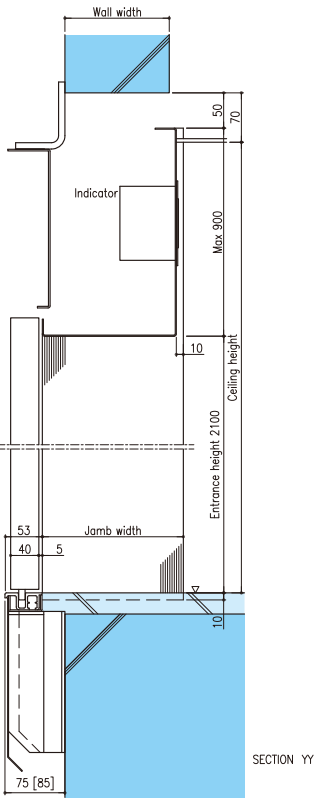
Note: [] : With fire rated door

Dimensions

- Building structure (by other contractors)
- Wall and floor finishing (by other contractors)
- Grouting (by other contractors)

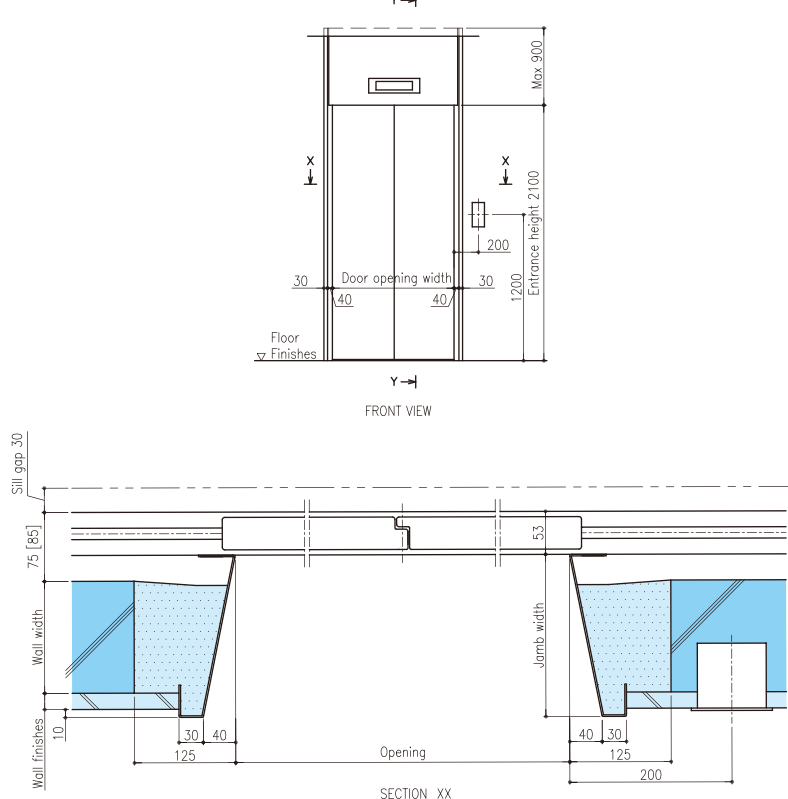
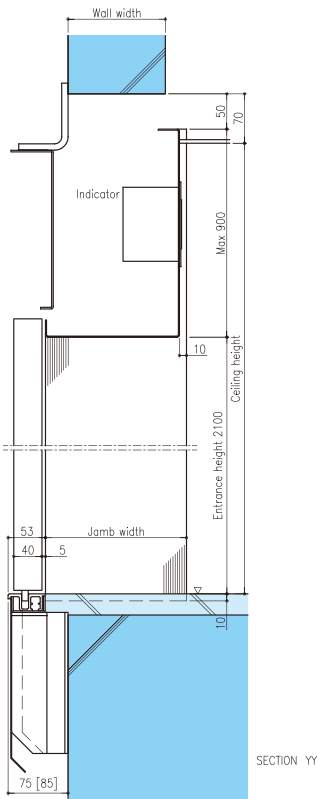
SL-2X(2PC0) Option

(unit: mm)



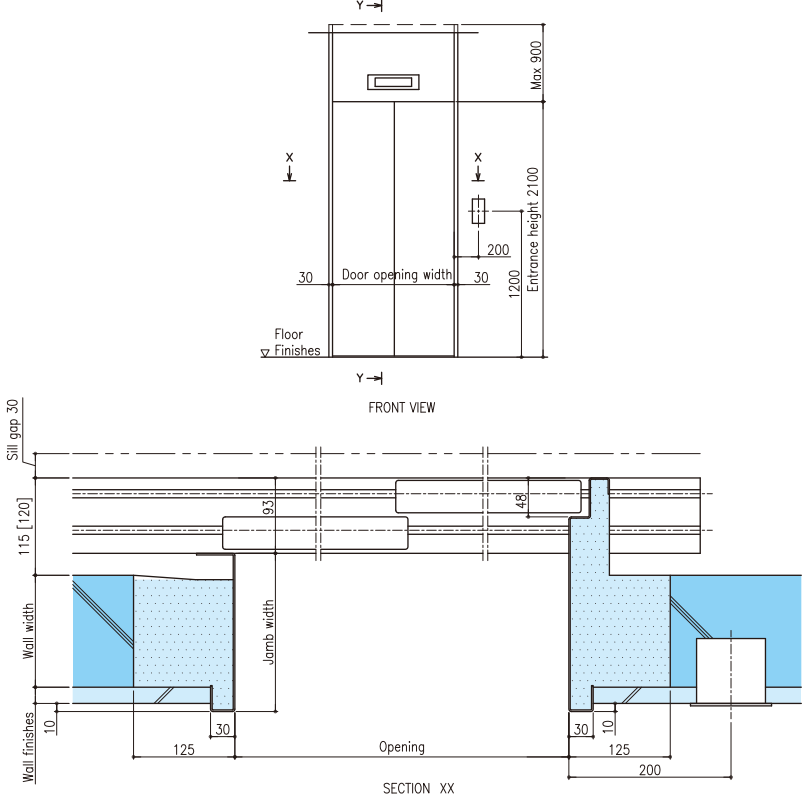
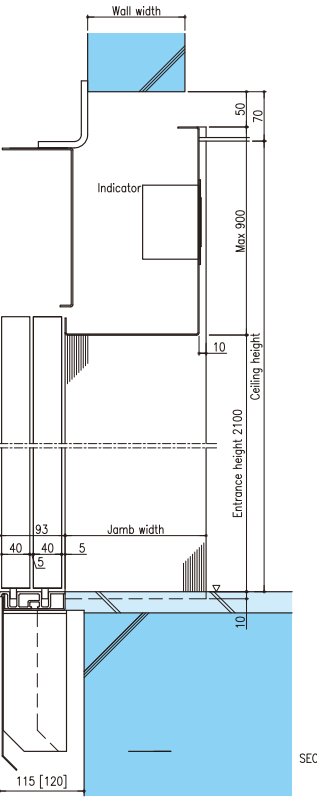
TL-2X(2PC0) Option

(unit: mm)



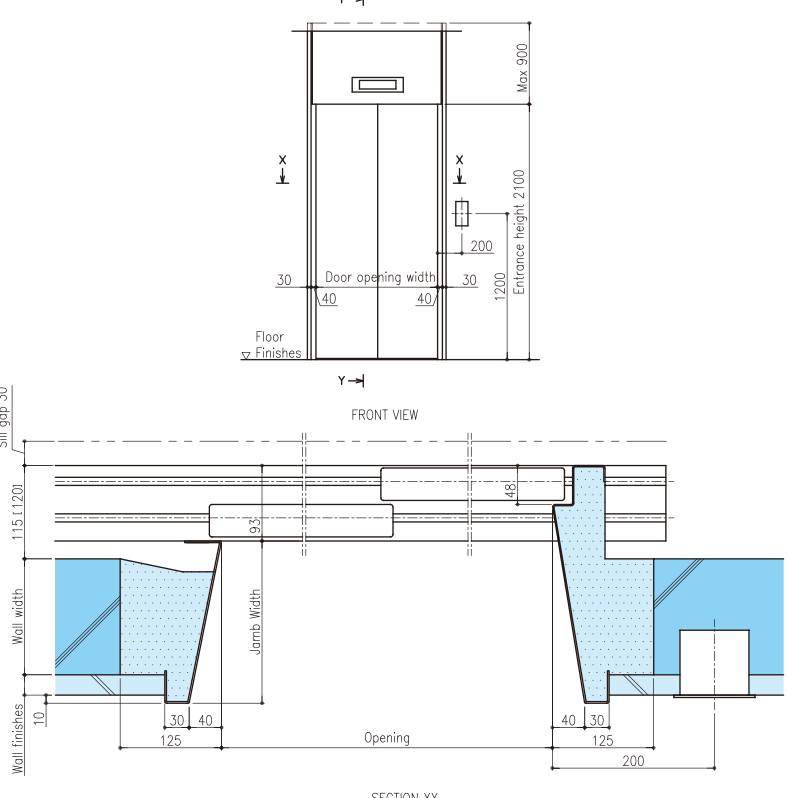
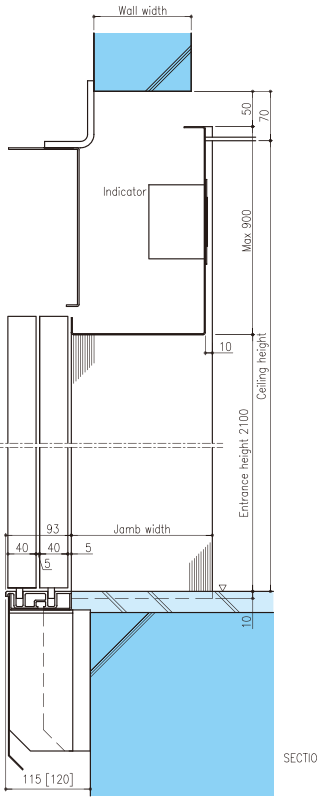
SL-2X(2S2P) Option

Note: [] : With fire rated door



TL-2X(2S2P) Option

Note: [] : With fire rated door



Work to be done by building contractors

The preparatory work for elevator installation outlined in below table should be undertaken by building contractors in accordance with Hitachi drawings and in compliance with local or relevant codes and regulations

No.	ITEMS
1	Prepare hoistway with proper framing and enclosure, suitable pit of proper depth with drains and water-proofing if required, properly lit and ventilated hoistway of adequate size with concrete floors, access doors, ladders and guards as required.
2	Provide and / or cut all necessary holes, chases, openings and finishes after equipment installation.
3	Supply and secure all supports, reinforced concrete slabs, etc., necessary for installation of the machinery, doors, buffers, etc.
4	Furnish all necessary cement and / or concrete for grouting of brackets, bolts, machine beams, etc.
5	Prepare and erect suitable scaffolding and protective measures during work in progress.
6	Furnish mains for three-phase electric power and single-phase lighting supply for car lighting and lift pit and power outlet to the hoistway, following the instructions of the elevator contractor on outlet position and wire size.
7	Provide, free of charge, a suitable theft-proof storage area for materials and tools during erection work.
8	Supply electric power for lighting of work area, installation work, elevator testing and spray painting.
9	Hoisting hook at top of the hoistway.
10	Hoistway ventilation to be provided to maintain the hoistway temperature at below 40°C.
11	Manufacture and installation of separating beam (if necessary).

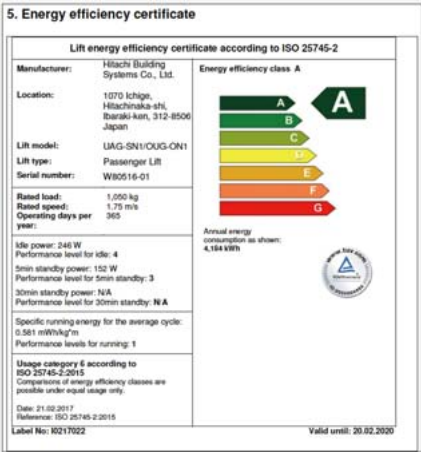
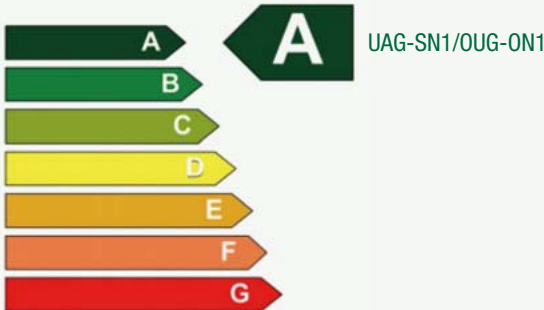
Hitachi Eco-Achievement

HITACHI's elevators achieved the highest energy efficiency class rating.

ISO 25745 is an international standard for evaluating the energy consumption and classifying the energy efficiency of elevators and escalators. ISO 25745-2 applies to the energy efficiency of elevators. It establishes seven classes, from A to G, with class A representing the highest level of energy efficiency.

Hitachi's UAG-SN1 and OUG-ON1 have achieved the highest rating.

Energy efficiency class A



Model	UAG-SN1/OUN1	UAG-SN1/OUN1
Location	Japan	Japan
Rated load	1,050 kg	1,635 kg
Rated speed	1.75 m/s	1.75 m/s
No. of stops	4	4
Travel	19.5 m	19.5 m
Operating days per year	365	365
Annual energy consumption	4,184 kWh	4,633 kWh
Usage category	6	5
Classification of lift [A-G]	A	A

Note: The measured class differs depending on the usage conditions.



Our achievement & Future

The ultra-high-speed elevators

Hitachi delivered the ultra-high-speed elevators, with a speed of 1,200 m/min. (20 m/sec.), to the Guangzhou CTF Finance Centre (530 meters tall), a mixed-use skyscraper in Guangzhou, China, for the full opening of the building in 2016. The elevators feature technologies that support safe and comfortable operation, in addition to the drive and control technologies needed to attain the ultra-high-speeds. Through these technologies, Hitachi ensures that the elevators provide passengers with a comfortable ride even when operated at high speeds.

1 Drive and control technologies to attain the ultra-high-speed of 1,200 m/min.

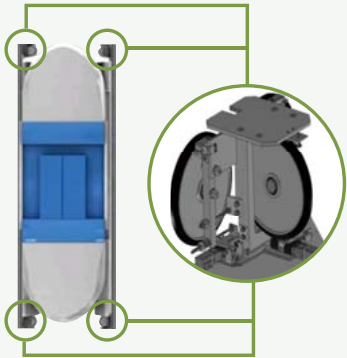
Hitachi has developed a permanent magnet synchronous motor that achieves both a thin profile and the high output needed to attain a speed of 1,200 m/min.



Traction mechanism for 1,200 m/min.

2 Safety features supporting ultra-high-speed elevator operation.

Hitachi developed brake equipment using braking materials with outstanding heat resistance to safely stop the elevator car in the unlikely event that a malfunction is detected during ultra-high-speed operation.



Active guide rollers (3D model)

3 Elevators can be used comfortably and safely even over long travel.

- Active guide rollers that detect minute warping in the guide rails and lateral vibration due to wind pressure are installed in the four corners (top and bottom, left and right) of the elevator car. This gives passengers a comfortable ride even during high-speed operation.
- The sensation of ear blockage is reduced by Hitachi's proprietary air pressure adjustment technology, which reduces the changes in air pressure inside the elevator car that would otherwise be caused by vertical movement through long travel.

Research and development

Modern manufacturing plants in Thailand and Singapore supply valuable products to customers. Equipment is made to the highest standards of quality and reliability on cutting-edge production lines.



Siam Hitachi Elevator Co., Ltd. (Thailand)



Hitachi Elevator Asia Pte. Ltd. (Singapore)

Excellence and flexibility in design at manufacturing plants in Thailand and Singapore

The modern manufacturing plant in Thailand and Singapore boasts a complete team of local and Japanese engineers and is geared towards providing maximum flexibility in design and manufacturing to suit customer requirements.

High accuracy and efficiency in planning of equipment layout is made possible by the most advanced CAD systems.

Equipment is made to the highest standards of quality and reliability with modern CNC machinery.



Mito Works, Hitachi, Ltd. (Japan)

An integrated engineering system from development to design and production

Head office, research centers, and plants work closely together to develop new technologies.

Staff throughout the company work together as one team to conduct research and develop technologies.

High performance simulator enhances overall elevator system efficiency.

A high-performance simulator is utilized for all stages of elevator development, from planning through system design. Planning, research and development are carried out according to the results of this statistical analysis.

Cutting-edge CAD/CAM systems

The latest in CAD/CAM systems help us carry out elevator layout and various other design and production steps more quickly and efficiently.

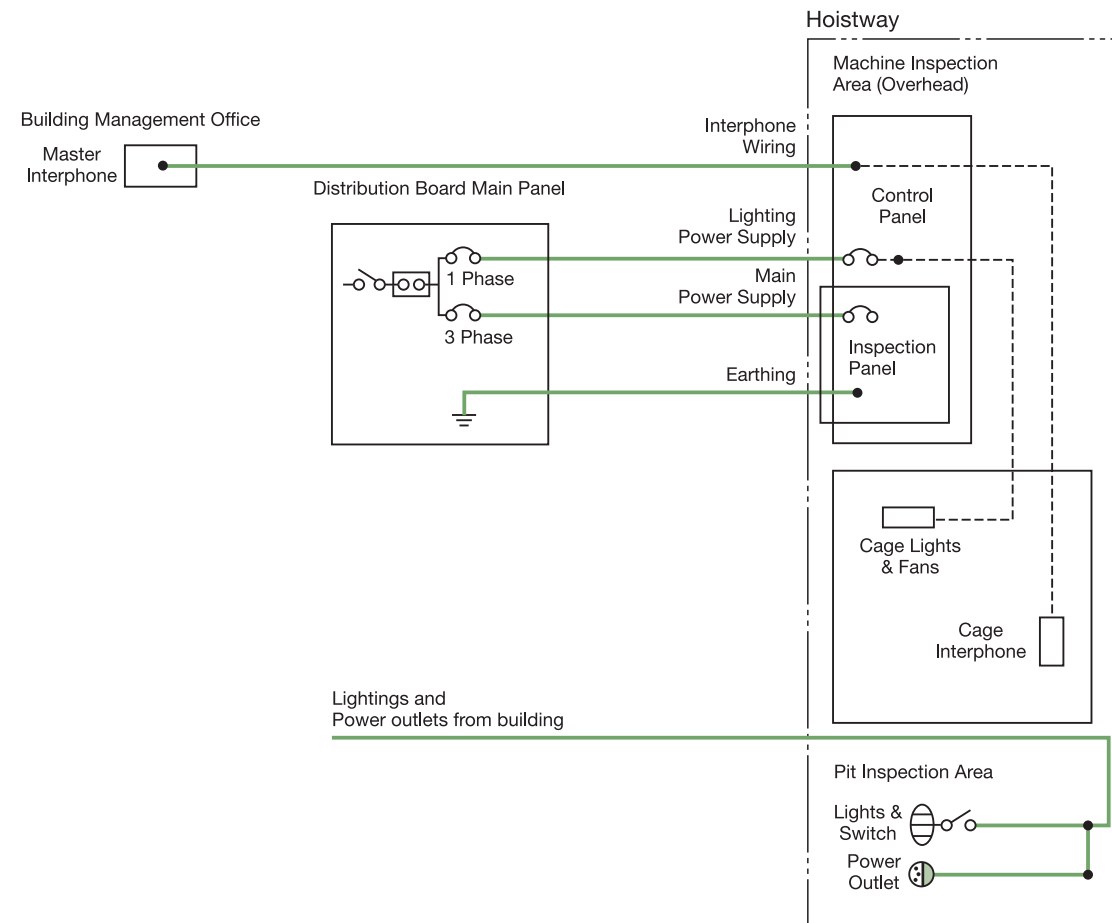


Hitachi provides a wide array of products and services – from home appliances to societal infrastructure. We integrate the capabilities of our entire group at a high level, taking on the challenge of innovation to build a better future without losing sight of the perspective of our customers. Our development of superior, innovative technology and products supports a safe, secure, comfortable lifestyle and a fair society for all. This is the conviction that infuses Hitachi's craftsmanship.

- Information and telecommunication systems
- Power systems
- Social infrastructure and industrial systems
- Electronic systems and equipment
- Construction machinery
- Highly functional materials and components
- Automotive systems
- Smart life and eco-friendly systems

■ Wiring Diagram

- shows the works to be done by others.



■ **Work to be provided by other contractors**

Item	Works to be provided by others
Main power supply *1	To provide AC 3 phase 200 to 480v 50/60Hz main power supply with maintaining to ensure that the power supply does not fluctuate outside the range of -10% to +10% of the normal voltage rating and to ensure that the unbalance factor of voltage does not exceed 5%.
Lighting power supply *1	To supply and install AC single phase (20Amp) lighting power supply for car lighting, EBOPS and maintenance work.
Interphone *1	To provide piping and wiring (12 wires of 0.9mm ² /elevator) for interphone located outside the hoistway.
Pit, hoistway lightings & power outlets	To supply and install AC single phase power outlet and lighting with switch located at accessible area from the entrance at bottom landing level for maintenance purpose. Arrange necessary to comply to local code & regulation.

*1 Main power, lighting power, indicator power supply and interphone wiring shall be led into the hoistway at the highest lift landing.

Note: In the case that builder provides leak current detector at the side of main power, please use "inverter type" or "detector which does not do unnecessary operation for high frequency".

MACHINE ROOM-LESS ELEVATOR

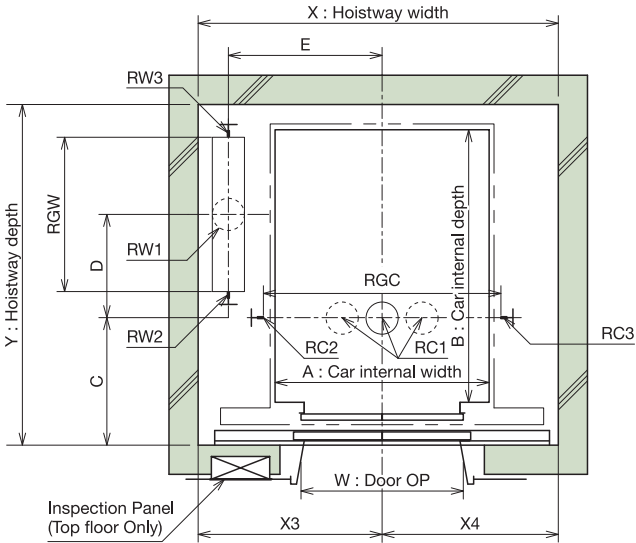
Model OUG Series ON1

PLANNING INFORMATION

Dimension of Hoistway and Pit Reaction Loading

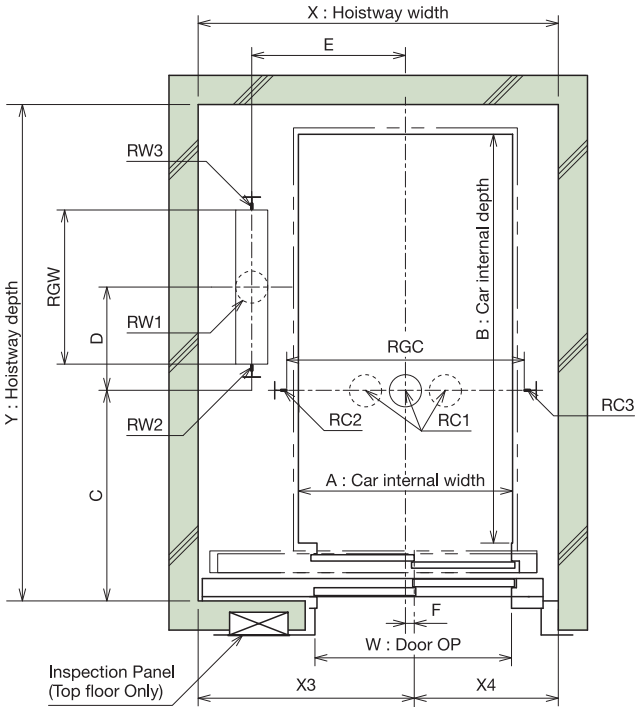
Hoistway dimension

2PCO



Hoistway dimension and Pit reaction loading

2S2P



Hoistway dimension and Pit reaction loading

Dimension of Hoistway and Pit Reaction Loading

Dimension and reaction loading of hoistway

Based on Hitachi standard and EN81-20/50 regulations

No.	Load [kg]	Persons	Rated speed [m/s] (m/min)	Door type	Door OP width W [mm]	Car internal size A × B [mm]	Hoistway X × Y [mm]	Location [mm]										Pit reaction loading *3*4*5 [kN]											
																		Car side			Counterweight side								
								X3	X4 *1	C *2	D	E	F	RGC	RGW	RC1	RC2	RC3	RW1	RW2	RW3								
1	600	8	1.0(60)	2PCO	800	1100×1400	1900×1800	1000	900	680 [690]	845	1330	800	71.0	34.0(220.5)	27.5(214.0)	59.0	15.5(198.5)	25.0(211.5)										
2			1.5(90)												1400×1100	2050×1700 (2100×1700)		1105	945 (995)	635 [645]	530	950	1540	800	70.5	37.5(279.5)	30.5(273.0)	18.5(256.5)	28.0(270.0)
3			1.75(105)																							1350×1400	2150×1800	1150	1000
4			1.0(60)			1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800			91.0												
5			1.5(90)												1500×1450	2200×1850		1175	1025	705 [715]	530	1000	1640	800	91.0				
6			1.75(105)																							1600×1350	2350×2000	1285	1065
7	1.0(60)	1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800	91.0	41.0(230.5)	33.0(222.5)	17.0(201.5)			29.0(218.0)												
8	1.5(90)											1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800	91.0	44.5(289.5)	36.5(281.5)	20.0(259.5)	32.0(277.0)				
9	1.75(105)																					1600×1350	2350×2000	1285	1065	705 [715]	640	1060	900
10	2.0(120)	1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800	91.0																		
11	2.5(150)											1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800	91.0								
12	1.0(60)																					1600×1350	2350×2000	1285	1065	705 [715]	640	1060	900
13	1.5(90)	1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800	91.0																		
14	1.75(105)											1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800	91.0								
15	2.0(120)																					1600×1350	2350×2000	1285	1065	705 [715]	640	1060	900
16	2.5(150)	1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800	91.0																		
17	1.0(60)											1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800	91.0								
18	1.5(90)																					1600×1350	2350×2000	1285	1065	705 [715]	640	1060	900
19	1.75(105)	1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800	91.0																		
20	2.0(120)											1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800	91.0								
21	2.5(150)																					1600×1350	2350×2000	1285	1065	705 [715]	640	1060	900
22	1.0(60)	1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800	91.0																		
23	1.5(90)											1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800	91.0								
24	1.75(105)																					1600×1350	2350×2000	1285	1065	705 [715]	640	1060	900
25	2.0(120)	1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800	91.0																		
26	2.5(150)											1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800	91.0								
27	1.0(60)																					1600×1350	2350×2000	1285	1065	705 [715]	640	1060	900
28	1.5(90)	1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800	91.0																		
29	1.75(105)											1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800	91.0								
30	2.0(120)																					1600×1350	2350×2000	1285	1065	705 [715]	640	1060	900
31	2.5(150)	1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800	91.0																		
32	1.0(60)											1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800	91.0								
33	1.5(90)																					1600×1350	2350×2000	1285	1065	705 [715]	640	1060	900
34	1.75(105)	1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800	91.0																		
35	2.0(120)											1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800	91.0								
36	2.5(150)																					1600×1350	2350×2000	1285	1065	705 [715]	640	1060	900
37	1.0(60)	1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800	91.0																		
38	1.5(90)											1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800	91.0								
39	1.75(105)																					1600×1350	2350×2000	1285	1065	705 [715]	640	1060	900
40	2.0(120)	1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800	91.0																		
41	2.5(150)											1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800	91.0								
42	1.0(60)																					1600×1350	2350×2000	1285	1065	705 [715]	640	1060	900
43	1.5(90)	1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800	91.0																		
44	1.75(105)											1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800	91.0								
45	2.0(120)																					1600×1350	2350×2000	1285	1065	705 [715]	640	1060	900
46	2.5(150)	1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800	91.0																		
47	1.0(60)											1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800	91.0								
48	1.5(90)																					1600×1350	2350×2000	1285	1065	705 [715]	640	1060	900
49	1.75(105)	1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800	91.0																		
50	2.0(120)											1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800	91.0								
51	2.5(150)																					1600×1350	2350×2000	1285	1065	705 [715]	640	1060	900
52	1.0(60)	1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800	91.0																		
53	1.5(90)											1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800	91.0								
54	1.75(105)																					1600×1350	2350×2000	1285	1065	705 [715]	640	1060	900
55	2.0(120)	1100×2000	1900×2400	1010	890	980 [990]	530	845	1330	800	91.0																		
56	2.5(150)											1500×1450	2200×1850	1175	1025	705 [715]	530	1000	1640	800									

Dimension of Hoistway and Pit Reaction Loading

Dimension and reaction loading of hoistway

Based on Hitachi standard and EN81-20/50 regulations

No.	Load [kg]	Persons	Rated speed [m/s] (m/min)	Door type	Door OP width W [mm]	Car internal size A × B [mm]	Hoistway X × Y [mm] ^{*1}	Location [mm]								Pit reaction loading ^{*3*4*5} [kN]																
																Car side			Counterweight side													
								X3	X4 ^{*1}	C ^{*2}	D	E	F	RGC	RGW	RC1	RC2	RC3	RW1	RW2	RW3											
112	1600	21	1.0(60)	2S2P	1200	1400×2400	2300×2850	1355	945	1257 [1262]	1055	95	1630	900	71.5x2sets	63.5(390.5)	51.0(377.5)	113.5	25.5(341.5)	44.0(371.0)												
113			1.5(90)												72.5x2sets	69.5(494.0)	56.0(481.0)	115.5	29.5(442.5)	49.0(473.5)												
114			1.75(105)												145.0																	
115			2.0(120)												162.0	85.0(710.0)	70.5(695.5)	129.5	40.0(650.0)	64.5(687.5)												
116			2.5(150)																													
117			1.0(60)												75.75x2sets	66.5(398.0)	53.0(385.0)	119.5	26.5(346.5)	45.5(377.5)												
118			1.5(90)	2000×1750	2800×2150	1495	1305	855 [865]	1310	—	2140	151.5	71.5(501.0)			58.0(487.0)	30.0(448.0)		50.0(479.5)													
119			1.75(105)																													
120			2.0(120)									162.0	85.0(710.0)			70.5(695.5)	129.5	40.0(650.0)	64.5(687.5)													
121			2.5(150)									2850×2150	1535			1315																
122			1800	23	1.0(60)	2S2P	1200	1500×2500	2500×2950	1555	945	1307 [1312]	640	1130	145	1730	84.75x2sets	65.5(397.5)	57.5(389.5)	135.5	34.5(353.0)	51.0(383.0)										
123		1.5(90)			2100×1700												3000×2100	1660	1340		830 [840]	1385	—	2240	70.5(499.5)	62.5(492.0)	39.0(454.0)	55.5(485.0)				
124		1.75(105)																							169.5	70.5(499.5)	62.5(492.0)	39.0(454.0)	55.5(485.0)			
125	24	1.0(60)		2S2P	1200	1500×2500	2500×2950	1555	945	1307 [1312]	640	1130		145	1730	900	84.75x2sets	65.5(397.5)	57.5(389.5)	133.5	34.5(353.0)	51.0(383.0)										
126		1.5(90)															2100×1700	3000×2100	1660		1340	830 [840]	1385	—	2240	70.5(499.5)	62.5(492.0)	39.0(454.0)	55.5(485.0)			
127		1.75(105)																								169.5	70.5(499.5)	62.5(492.0)	39.0(454.0)	55.5(485.0)		
128		1.0(60)		2PCO	1100	2000×1800	2900×2200	1610	1290	880 [890]		640	1335	—	2140		900	84.75x2sets	65.5(397.5)	57.5(389.5)	135.5	34.5(353.0)	51.0(383.0)									
129		1.5(90)																2100×1700	3000×2100	1660		1340	830 [840]	1385	—	2240	70.5(499.5)	62.5(492.0)	39.0(454.0)	55.5(485.0)		
130		1.75(105)																									169.5	70.5(499.5)	62.5(492.0)	39.0(454.0)	55.5(485.0)	
131	2000	26		1.0(60)	2S2P	1300	1500×2700	2500×3150	1505	995	1407 [1412]		640	1130	95	1730		900	89.75x2sets	68.0(400.0)	60.0(392.0)	139.5	35.5(353.0)	52.5(384.5)								
132				1.5(90)															2100×1700	3000×2100	1660		1340	830 [840]	1385	—	2240	73.0(502.5)	65.0(494.0)	39.5(454.5)	57.0(486.5)	
133				1.75(105)																								179.5	73.0(502.5)	65.0(494.0)	39.5(454.5)	57.0(486.5)
134				1.0(60)	2PCO	1100	2000×2000	2900×2400			980 [990]			640	1335	—	2140		900	89.75x2sets	68.0(400.0)	60.0(392.0)	141.5	35.5(353.0)	52.5(384.5)							
135			1.5(90)	2100×1700																3000×2100	1660	1340		830 [840]	1385	—	2240	73.0(502.5)	65.0(494.0)	39.5(454.5)	57.0(486.5)	
136			1.75(105)																									179.5	73.0(502.5)	65.0(494.0)	39.5(454.5)	57.0(486.5)
137			1.0(60)	2000×2100			2900×2500			1030 [1040]		640	1335		—	2140	900	90.75x2sets		68.5(400.5)	60.5(392.5)	141.5		36.0(353.5)	53.0(385.0)							
138			1.5(90)															2100×1700		3000×2100	1660			1340	830 [840]	1385	—	2240	73.5(503.0)	65.5(494.5)	40.0(454.5)	57.5(487.0)
139			1.75(105)																										181.5	73.5(503.0)	65.5(494.5)	40.0(454.5)

*1 ():Travel distance > 60m

*2 []:With fire rated door

*3 ():EN81-20/50 regulations

*4 Rated speed 1.0m/s : Travel distance ≤ 60m
Rated speed 1.5 , 1.75m/s : Travel distance ≤ 80m
Rated speed 2.0 , 2.5m/s : Travel distance ≤ 120m

*5 The pit reaction loading differs depending on the specifications and design, please consult Hitachi or local agent.

Note: Above tables shows the dimensions on the following conditions

(1) Single elevator in hoistway (2) Without counterweight safety

Please consult Hitachi or local agent if other specifications are required.

Based on Malaysian regulations

No.	Load [kg]	Persons	Rated speed [m/s] (m/min)	Door type	Door OP width W [mm]	Car internal size A × B [mm]	Hoistway X × Y [mm]	Location [mm]										Pit reaction loading *3*4 [kN]					
																		Car side			Counterweight side		
								X3	X4 *1	C *2	D	E	F	RGC	RGW	RC1	RC2	RC3	RW1	RW2	RW3		
1	615	9	1.0(60)	2PCO	800	1150×1400	1950×1800	1050	900	680 [690]	530	870	—	1380	800	74.0	225.0	218.0	61.5	201.5	215.5		
2			1.5(90)														284.0	277.0		259.5	274.0		
3			1.75(105)													79.5	227.0	219.5	64.0	201.5	216.0		
4	1.0(60)	286.0	278.5			259.5	274.5																
5	750	11	1.5(90)			1350×1400	2150×1800	1150	1000			970		1580	900	97.5	689.5	679.0	81.5	651.0	677.0		
6			1.75(105)																				
7			2.0(120)														1235	1015			640	1030	
8	2.5(150)																						
9	885	13	1.0(60)	2PCO	900	1500×1450	2200×1850	1175	1025	705 [715]	530	1000	—	1640	800	90.5	230.5	222.5	72.5	201.5	218.0		
10			1.5(90)														289.5	281.0		259.5	276.5		
11			1.75(105)													90.5			72.5				
12			2.0(120)					1285	1065		640	1060					693.0	682.0		651.0	679.0		
13			2.5(150)			1600×1350	2350×2000	1315	1035 (1085)	655 [665]	530	1105		1740	800	91.5	228.0	219.5	73.5	198.5	215.5		
14			1.0(60)														287.0	278.5		256.5	274.0		
15			1.5(90)					1335	1115	705 [715]	640	1110			900	110.5	693.5	682.5	92.0	651.0	679.5		
16			1.75(105)																				
17			2.0(120)			1100×2100	1900×2550 (1950×2550)	1115	785 (835)	1107 [1112]	45	1330	800	96.0	229.5	221.0	77.0	198.5	216.0				
18	2.5(150)	2000×2550	1155	845		640	905	900	113.0	694.5										683.0	93.5	651.0	680.0
19	955	14	1.0(60)	2S2P	1000	1100×2100	1900×2550 (1950×2550)	1115	785 (835)	1107 [1112]			530	845	—	1330	800	96.0	229.5	221.0	77.0	198.5	216.0
20			1.5(90)								288.5	280.0							256.5	275.0			
21			1.75(105)								90.5								77.0				
22			2.0(120)					1285	1065			640	1060					693.0		682.0	651.0	679.0	
23			2.5(150)			1600×1450	2300×1850	1225	1075	705 [715]	530	1050		1740		800	95.0	232.0	223.5	76.0	201.5	219.0	
24			1.0(60)															291.0	282.5		259.5	277.5	
25			1.5(90)					1335	1115	705 [715]	640	1110				900	113.0	694.5	683.0	93.5	651.0	680.0	
26			1.75(105)																				
27	2.0(120)	1600×1550	2300×1950	1225	1075	755 [765]	530	1050		1740	800	98.0	229.5	221.5	77.5	198.5	216.5						
28	2.5(150)												289.0	280.0		256.5	275.0						
29	1.0(60)										2450×2050	1335	1115		1110	116.0	695.0	683.5	95.0	651.0	680.5		
30	1025			15	1.5(90)	2PCO	900	1600×1550	2300×1950		1225	1075	755 [765]	530	1050		1740	800	98.0	229.5	221.5	77.5	198.5
31		1.75(105)	289.0		280.0					256.5										275.0			
32		2.0(120)	2450×2050		1335					1115										1110	116.0	695.0	683.5
33		2.5(150)																					
34	1160	17	1.0(60)	2S2P	1100	1200×2300	2100×2750	1210	890	1207 [1212]	955	45	1430	900	119.0	388.0	377.0	95.5	347.0	372.0			
35			1.5(90)													490.5	479.0		448.0	474.0			
36			1.75(105)													127.0	699.0	686.5	103.5	650.5	683.0		
37			2.0(120)					387.5	376.5	346.5	371.5												
38			2.5(150)			1600×1700	2400×2100	1295	1105	830 [840]	1110	1740		117.0	490.0	478.5	93.5	448.0	473.5				
39			1.0(60)												490.0	478.5	93.5	448.0	473.5				
40			1.5(90)											127.0	699.0	686.5	103.5	650.5	683.0				
41			1.75(105)					382.0	371.0	94.5	342.0	366.0											
42	2.0(120)	1800×1500	2600×2000	1390	1210	730 [740]	1210	1940	121.0	486.0	474.5	98.5	443.0	469.0									
43	2.5(150)									486.0	474.5	98.5	443.0	469.0									
44	1.0(60)								127.0	699.0	686.5	103.5	650.5	683.0									
45	1.5(90)			391.0	379.0	347.0	373.5																
46	1.75(105)	128.5	493.5	481.5	102.5	448.0	475.5																
47	2.0(120)							391.0	379.0	347.0	373.5												
48	2.5(150)							493.5	481.5	448.0	475.5												
49	1295	19	1.0(60)	2S2P	1100	1300×2300	2200×2750	1290	910	1207 [1212]	1005	95	1530			128.5	391.0	379.0	102.5	347.0	373.5		
50			1.5(90)														493.5	481.5		448.0	475.5		
51			1.75(105)														391.0	379.0		347.0	373.5		
52	2.0(120)	138.5	702.5	689.5	112.0	650.5	685.0																
53	2.5(150)																						

Dimension of Hoistway and Pit Reaction Loading

Dimension and reaction loading of hoistway

Based on Malaysian regulations

No.	Load [kg]	Persons	Rated speed [m/s] (m/min)	Door type	Door OP width W [mm]	Car internal size A × B [mm]	Hoistway X × Y [mm]	Location [mm]								Pit reaction loading *3*4 [kN]						
																Car side			Counterweight side			
								X3	X4 *1	C *2	D	E	F	RGC	RGW	RC1	RC2	RC3	RW1	RW2	RW3	
54	1365	20	1.0(60)	2PCO	1000	1800×1750	2600×2150	1395	1205	855 [865]		1210		1940		66.5x2sets	392.5	380.5	105.5	346.5	374.0	
55			1.5(90)														495.0	482.5		448.0	476.0	
56			1.75(105)													133.0						
57			2.0(120)				2650×2150	1435	1215							141.0	703.5	690.0	113.5	650.5	685.5	
58			2.5(150)																			
59			1.0(60)		1100	2000×1550	2800×2050	1495	1305	755 [765]		1310		2140		66.5x2sets	387.0	375.0	105.5	341.5	369.0	
60			1.5(90)														487.5	477.0		443.0	471.5	
61			1.75(105)													133.0						
62			2.0(120)				2850×2050	1535	1315							141.0	703.5	690.0	113.5	650.5	685.5	
63			2.5(150)																			
64	1500	22	1.0(60)	2S2P	1200	1400×2400	2300×2850	1355	945	1257 [1262]		1055	95	1630		71.5x2sets	390.5	377.5	115.5	341.5	371.0	
65			1.5(90)													72.5x2sets	494.0	481.0		442.5	473.5	
66			1.75(105)													145.0						
67			2.0(120)														154.0	707.5	693.5	124.0	650.5	688.0
68			2.5(150)																			
69	1565	23	1.0(60)	2PCO	1100	2000×1750	2800×2150	1495	1305	855 [865]		640		900		75.0x2sets	398.0	384.5	118.5	347.0	377.5	
70			1.5(90)													150.0	500.5	487.0		448.0	479.0	
71			1.75(105)				2850×2150	1535	1315			1310		2140		160.5	709.5	695.0	129.0	650.5	689.0	
72			2.0(120)																122.5	347.0	378.0	
73			2.5(150)																			
74	1635	24	1.0(60)	2PCO	1100	2000×1800	2800×2200	1495	1305	880 [890]		1310		2140		77.75x2sets	399.5	386.0	122.5	347.0	378.0	
75			1.5(90)														502.0	488.0		448.0	480.0	
76			1.75(105)				2850×2200	1535	1315							165.5	711.0	696.0	132.5	650.5	690.0	
77			2.0(120)																132.0	353.0	382.0	
78			2.5(150)																			
79	1705	25	1.0(60)	2S2P	1200	1500×2500	2500×2950	1555	945	1307 [1312]		1130	145	1730		83.0x2sets	396.5	388.5	132.0	353.0	382.0	
80			1.5(90)													166.0	498.5	491.0		454.0	484.0	
81			1.75(105)																136.5	353.0	383.5	
82	1835	27	1.0(60)	2PCO	1100	2000×2000	2900×2400	1610	1290	980 [990]		1335	—	2140		86.5x2sets	398.0	390.5		353.0	383.5	
83			1.5(90)														500.5	492.5	137.5	454.5	485.5	
84			1.75(105)													173.0						
85	1905	28	1.0(60)	2S2P	1300	1500×2700	2500×3150	1505	995	1407 [1412]		1130	95	1730		88.0x2sets	399.0	391.0	137.5	353.0	384.0	
86			1.5(90)														501.5	493.5		454.5	486.0	
87			1.75(105)													176.0			141.0	353.5	384.5	
88	1975	29	1.0(60)	2PCO	1100	2000×2100	2900×2500	1610	1290	1030 [1040]		1335	—	2140		90.25x2sets	400.5	392.0		353.5	384.5	
89			1.5(90)														502.5	494.5	141.0	454.5	486.5	
90			1.75(105)													180.5						

*1 ():Travel distance > 60m

*2 []:With fire rated door

*3 Rated speed 1.0m/s : Travel distance ≤ 60m
Rated speed 1.5 , 1.75m/s : Travel distance ≤ 80m
Rated speed 2.0 , 2.5m/s : Travel distance ≤ 120m

*4 The pit reaction loading differs depending on the specifications and design, please consult Hitachi or local agent.

Note: Above tables shows the dimensions on the following conditions

(1) Single elevator in hoistway (2) Without counterweight safety

Please consult Hitachi or local agent if other specifications are required.

Based on Hitachi standard for India

No.	Load [kg]	Persons	Rated speed [m/s] (m/min)	Door type	Door OP width W [mm]	Car internal size A × B [mm]	Hoistway X × Y [mm]	Location [mm]								Pit reaction loading *3*4 [kN]									
																Car side			Counterweight side						
								X3	X4 *1	C *2	D	E	F	RGC	RGW	RC1	RC2	RC3	RW1	RW2	RW3				
1	612	9	1.0(60)	2PCO	800	1100×1400	1900×1800	1000	900	680 [690]		845		1330		71.5	34.0	28.0	59.5	16.0	25.0				
2			1.5(90)														37.5	31.0		18.5	28.0				
3			1.75(105)													71.0	34.0	27.5	59.0	15.5	25.0				
4			1.0(60)			1400×1100	2050×1700 (2100×1700)	1105	945 (995)	635 [645]	530	950		1540	800		37.5	31.0		18.5	27.5				
5			1.5(90)													79.5	41.0	33.5	64.0	16.5	27.0				
6			1.75(105)			97.0	64.5	54.5	81.5	35.5	52.5														
7	748	11	1.0(60)			2PCO	800	1350×1400	2150×1800	1150	1000	680 [690]		970		1580		71.5	34.0	28.0	59.5	16.0	25.0		
8			1.5(90)																37.5	31.0		18.5	28.0		
9			1.75(105)															71.0	34.0	27.5	59.0	15.5	25.0		
10			1.0(60)	1400×1100	2050×1700 (2100×1700)			1105	945 (995)	635 [645]	530	950		1540	800	37.5	31.0		18.5	27.5					
11			1.5(90)													79.5	41.0	33.5	64.0	16.5	27.0				
12			1.75(105)	97.0	64.5			54.5	81.5	35.5	52.5														
13	884	13	1.0(60)	2S2P	900			1100×2000	1900×2400	1010	890	980 [990]	530	845		1330		90.5	41.0	33.0	72.5	17.0	28.5		
14			1.5(90)																44.5	36.0		19.5	31.5		
15			1.75(105)															90.5	41.0	33.0	72.5	17.0	28.5		
16			2.0(120)			44.5	36.0	19.5	31.5																
17			2.5(150)			110.5	41.0	33.0	72.5	17.0	28.5														
18			1.0(60)				44.5	36.0		19.5	31.5														
19	884	13	1.5(90)			2S2P	900	1100×2000	1900×2450	1110	790	1057 [1062]	530	845		1330		90.5	41.0	33.0	72.5	17.0	28.5		
20			1.75(105)																44.5	36.0		19.5	31.5		
21			2.0(120)															110.5	41.0	33.0	72.5	17.0	28.5		
22			2.5(150)	44.5	36.0			19.5	31.5																
23			1.0(60)	110.5	41.0			33.0	72.5	17.0	28.5														
24			1.5(90)		44.5			36.0		19.5	31.5														
25	884	13	1.75(105)	2PCO	900			1500×1450	2200×1850	1175	1025	705 [715]	530	1000		1640		90.5	41.0	33.0	72.5	17.0	28.5		
26			2.0(120)																44.5	36.0		19.5	31.5		
27			2.5(150)															90.5	41.0	33.0	72.5	17.0	28.5		
28			1.0(60)			44.5	36.0	19.5	31.5																
29			1.5(90)			110.5	41.0	33.0	72.5	17.0	28.5														
30			1.75(105)				44.5	36.0		19.5	31.5														
31	952	14	2.0(120)			2S2P	1000	1600×1350	2350×2000	1285	1065	705 [715]	640	1060		1740		91.5	41.0	33.0	73.5	17.0	27.0		
32			2.5(150)																44.5	36.5		19.5	32.0		
33			1.0(60)															110.5	41.0	33.0	73.5	17.0	27.0		
34			1.5(90)	44.5	36.5			19.5	32.0																
35			1.75(105)	110.5	41.0			33.0	73.5	17.0	27.0														
36			2.0(120)		44.5			36.5		19.5	32.0														
37	952	14	2.5(150)	2S2P	1000			1100×2100	1900×2550 (1950×2550)	1115	785 (835)	1107 [1112]	530	845		1330		94.5	42.5	34.0	76.0	17.5	29.5		
38			1.0(60)																42.5	34.0		76.0	17.5	29.5	
39			1.5(90)															110.5	42.5	34.0	76.0	17.5	29.5		
40			1.75(105)			42.5	34.0	76.0	17.5	29.5															
41			2.0(120)			110.5	42.5	34.0	76.0	17.5	29.5														
42			2.5(150)				42.5	34.0		76.0	17.5	29.5													
43	1020	15	1.0(60)			2PCO	900	1600×1400	2300×1800	1225	1075	680 [690]	530	1050		1740		94.0	42.0	34.0	75.0	17.5	29.5		
44			1.5(90)																42.0	34.0		75.0	17.5	29.5	
45			1.75(105)															110.5	42.0	34.0	75.0	17.5	29.5		
46			2.0(120)	42.0	34.0			75.0	17.5	29.5															
47			1020	15	2.5(150)			2S2P	900	1000×2400	1800×2850	1015	785	1257 [1262]	530	795		1230		99.5	43.0	35.5	79.0	17.5	30.5
48					1.0(60)																43.0	35.5		79.0	17.5
49	1.5(90)	110.5			43.0															35.5	79.0	17.5	30.5		
50	1.75(105)				43.0					35.5	79.0	17.5	30.5												
51	2.0(120)	110.5			43.0					35.5	79.0	17.5	30.5												
52	2.5(150)				43.0	35.5	79.0			17.5		30.5													
53	1020	15	1.0(60)	2PCO	1600×1500	2300×1900	1225			1075	730 [740]	530	1050		1740		97.5	43.0	35.0	77.0	17.5	30.0			
54			1.5(90)															43.0	35.0		77.0	17.5	30.0		
55			1.75(105)			110.5	43.0			35.0	77.0	17.5	30.0												
56			2.0(120)				43.0	35.0	77.0	17.5		30.0													

Dimension of Hoistway and Pit Reaction Loading

Dimension and reaction loading of hoistway

■ Based on Hitachi standard for India

No.	Load [kg]	Persons	Rated speed [m/s] (m/min)	Door type	Door OP width W [mm]	Car internal size A × B [mm]	Hoistway X × Y [mm]	Location [mm]								Pit reaction loading ^{*3} *4 [kN]						
																Car side			Counterweight side			
								X3	X4	C*2	D	E	F	RGC	RGW	RC1	RC2	RC3	RW1	RW2	RW3	
57	1156	17	1.0(60)	2PCO	1000	1600×1700	2400×2100	1295	1105	830 [840]	1110	—	1740	900	117.0	55.5	44.5	93.5	24.0	39.5		
58			1.5(90)													60.5	49.0		28.0	44.0		
59			1.75(105)													127.0	74.5		62.0	103.5	37.5	58.0
60			2.0(120)																			
61			2.5(150)																			
62			1.0(60)			1800×1500	2600×2000	1390	1210	730 [740]		1210	1940		117.0	54.5	44.0	94.5	23.5	39.0		
63			1.5(90)												121.0	61.5	50.0	98.5	28.0	44.5		
64			1.75(105)												127.0	74.5	62.0	103.5	37.5	58.0		
65			2.0(120)																			
66			2.5(150)																			
67	1224	18	1.0(60)	2S2P	1100	1200×2300	2100×2750	1210	890	1207 [1212]	955	45	1430	900	121.5	57.0	45.5	97.0	24.5	40.5		
68			1.5(90)													62.0	50.5		28.0	44.5		
69			1.75(105)													135.5	77.0		64.0	110.5	38.0	60.0
70			2.0(120)																			
71			2.5(150)																			
72			1.0(60)			2000×1400	2800×1950	1495	1305	680 [690]		1310	2140		123.5	57.5	46.0	98.5	24.5	40.5		
73			1.5(90)													62.5	51.0		28.5	45.0		
74			1.75(105)													135.5	77.0		64.0	110.5	38.0	60.0
75			2.0(120)																			
76			2.5(150)																			
77	1292	19	1.0(60)	2PCO	1000	1300×2300	2250×2700	1170	1080	1130 [1140]	640	—	1530	900	128.5	59.0	47.5	102.5	25.0	41.5		
78			1.5(90)													64.0	52.0		28.5	46.0		
79			1.75(105)													138.0	78.0		64.5	112.0	38.0	60.0
80			2.0(120)																			
81			2.5(150)																			
82			1.0(60)			2200×2750	1290	910	1207 [1212]	95		900	128.5		59.0	47.5	102.5	25.0	41.5			
83			1.5(90)												64.0	52.0		28.5	46.0			
84			1.75(105)												138.0	78.0		64.5	112.0	38.0	60.0	
85			2.0(120)																			
86			2.5(150)																			
87	1.0(60)	2000×1500	2800×2000	1495	1305	730 [740]	1310	2140	128.5	59.0	47.5	102.5	25.0	41.5								
88	1.5(90)									64.0	52.0		28.5	46.0								
89	1.75(105)									138.0	78.0		64.5	112.0	38.0	60.0						
90	2.0(120)																					
91	2.5(150)																					
92	1360	20	1.0(60)	2PCO	1000	1800×1700	2600×2100	1395	1205	830 [840]	1210	—	1940	900	65.5x2sets	60.0	48.0	103.5	25.0	42.0		
93			1.5(90)													65.0	52.5		29.0	46.5		
94			1.75(105)													141.0	78.5		65.5	113.5	38.5	60.5
95			2.0(120)																			
96			2.5(150)																			
97			1.0(60)			2000×1550	2800×2050	1495	1305	755 [765]		1310	2140		66.25x2sets	60.0	48.0	105.0	24.5	42.0		
98			1.5(90)													65.0	53.5		28.5	46.0		
99			1.75(105)													132.5	78.5		65.5	113.5	38.5	60.5
100			2.0(120)																			
101			2.5(150)																			
102	1428	21	1.0(60)	2PCO	1000	1800×1750	2600×2150	1395	1205	855 [865]	1210	—	1940	900	67.75x2sets	61.0	49.0	106.5	25.0	42.5		
103			1.5(90)													66.5	54.0		29.0	47.0		
104			1.75(105)													151.5	82.0		68.0	122.5	39.0	63.0
105			2.0(120)																			
106	2.5(150)	1496	22	1100	1400×2400	2500×2800	1245	1255	1180 [1190]	1055	1630	71.5x2sets	63.5	50.5	113.5	25.5	44.0					
107	1.0(60)											72.5x2sets	69.5	56.0	115.5	29.5	49.0					
108	1.5(90)											145.0										
109	1.75(105)											154.0	82.5	68.5	124.0	39.5	63.0					
110	2.0(120)																					
111	2.5(150)																					

*1 [] : Travel distance > 60m
 *2 [] : With fire rated door
 *3 Rated speed 1.0m/s : Travel distance ≤ 60m
 Rated speed 1.5 , 1.75m/s : Travel distance ≤ 80m
 Rated speed 2.0 , 2.5m/s : Travel distance ≤ 120m
 *4 The pit reaction loading differs depending on the specifications and design, please consult Hitachi or local agent.

Note: Above tables shows the dimensions on the following conditions
 (1) Single elevator in hoistway (2) Without counterweight safety
 Please consult Hitachi or local agent if other specifications are required.

■ Based on Hitachi standard for India

No.	Load [kg]	Persons	Rated speed [m/s] (m/min)	Door type	Door OP width W [mm]	Car internal size A × B [mm]	Hoistway X × Y [mm]	Location [mm]								Pit reaction loading *3*4 [kN]								
																Car side			Counterweight side					
								X3	X4	C *2	D	E	F	RGC	RGW	RC1	RC2	RC3	RW1	RW2	RW3			
112	1496	22	1.0(60)	2S2P	1200	1400×2400	2300×2850	1355	945	1257 [1262]		1055	95	1630		71.5x2sets	63.5	50.5	113.5	25.5	44.0			
113			1.5(90)													72.5x2sets	69.5	56.0	115.5	29.5	49.0			
114			1.75(105)													145.0								
115			2.0(120)													154.0	82.5	68.5	124.0	39.5	63.0			
116			2.5(150)																					
117	1564	23	1.0(60)			2000×1750		1495	1305	855 [865]		1310		2140		75.0x2sets	66.0	52.5	118.5	26.0	45.5			
118			1.5(90)													150.0	71.0	57.5		30.0	50.0			
119			1.75(105)													156.5	83.5	69.5	125.0	39.5	63.5			
120			2.0(120)																					
121			2.5(150)																					
122	1632	24	1.0(60)	2PCO	1100	2000×1800		1495	1305	880 [890]		640			900	77.75x2sets	67.5	54.0	122.5	26.5	46.5			
123			1.5(90)													72.5	58.5	30.5		50.5				
124			1.75(105)													155.5								
125			2.0(120)													159.5	84.5	70.0	39.5	64.0				
126			2.5(150)																					
127			1.0(60)			2100×1700		1540	1360	830 [840]						1360		2240	79.5x2sets	69.0	55.0	126.5	26.5	47.0
128			1.5(90)																74.0	59.5	30.5		51.5	
129			1.75(105)																159.0					
130			2.0(120)																159.5	84.5	70.0	39.5	64.0	
131			2.5(150)																					
132	1768	26	1.0(60)	2S2P	1200							1500×2500	2500×2950	1555	945				1307 [1312]		1130	145	1730	84.25x2sets
133			1.5(90)			70.0	62.0	38.5	55.0															
134			1.75(105)			168.5																		
135	1904	28	1.0(60)		1300	1500×2700	2500×3150	1505	995	1407 [1412]						88.0x2sets	67.0	59.0	137.5	35.5	52.0			
136			1.5(90)													72.0	64.0	39.5		56.5				
137			1.75(105)													176.0								
138			1.0(60)	2PCO	1100	2000×2000	2900×2400	1610	1290	980 [990]	88.0x2sets					67.0	59.0	35.5	52.0					
139			1.5(90)								72.0					64.0	39.5	56.5						
140			1.75(105)													176.0								

*1 [] : Travel distance > 60m
 *2 [] : With fire rated door
 *3 Rated speed 1.0m/s : Travel distance ≤ 60m
 Rated speed 1.5 , 1.75m/s : Travel distance ≤ 80m
 Rated speed 2.0 , 2.5m/s : Travel distance ≤ 120m
 *4 The pit reaction loading differs depending on the specifications and design, please consult Hitachi or local agent.

Note: Above tables shows the dimensions on the following conditions
 (1) Single elevator in hoistway (2) Without counterweight safety
 Please consult Hitachi or local agent if other specifications are required.

Dimension and reaction loading of hoistway

■ **Based on SS550**

No.	Load [kg]	Persons	Rated speed [m/s] (m/min)	Door type	Door OP width W [mm]	Car internal size A × B [mm]	Hoistway X × Y [mm]	Location [mm]										Pit reaction loading *3*4 [kN]											
																		Car side						Counterweight side					
								X3	X4 *1	C *2	D	E	F	RGC	RGW	RC1	RC2	RC3	RW1	RW2	RW3								
1	600	8	1.0(60)	2PCO	800	1100×1400	1950×1850	1035	915	680 [690]		845		1330	800	71.5	35.0	28.0	59.0	16.0	25.5								
2			1.5(90)														38.5	31.5		18.5	28.5								
3			1.75(105)														35.0	28.0		16.0	25.5								
4			1.0(60)			1400×1100	2150×1750	1150	1000	635 [645]	530	950	1540	38.5	31.5		18.5	28.5											
5			1.5(90)											37.0	30.0		16.5	26.5											
6			1.75(105)											40.5	33.0		19.0	29.5											
7	750	11	1.0(60)	2PCO	900	1350×1400	2200×1850	1175	1025	680 [690]		970		1580	900	78.0	37.0	30.0	63.0	16.5	26.5								
8			1.5(90)														40.5	33.0		19.0	29.5								
9			1.75(105)														101.0	66.0		55.5	85.5	35.5	53.0						
10			2.0(120)			1500×1450	2250×1900	1200	1050	705 [715]	530	1000	1640	800	90.5		41.0	33.0	17.0	28.5									
11			2.5(150)														44.5	36.0	72.5	19.5	31.5								
12			1.0(60)														2400×2050	1310	1090	640	1060	900	108.5	68.0	57.0	90.0	36.0	54.5	
13	885	13	1.5(90)	2PCO	900	1600×1350	2450×1800	1355	1095	655 [665]	530	1105		1740	800	91.5	38.0	33.5	73.5	21.0	28.5								
14			1.75(105)														41.0	36.5		73.5	24.0	31.5							
15			2.0(120)														2500×2050	1360		1140	705 [715]	640	1110	900	108.5	68.0	57.0	90.0	36.0
16			2.5(150)			1100×2000	1950×2500	1135	815	1057 [1062]	530	845	95	1330	800		91.0	41.0	33.0	17.0	29.0								
17			1.0(60)															2050×2500	1230	820	640	905	900	111.0	69.0	58.0	92.5	36.0	55.0
18			1.5(90)															2350×1850	1250	1100	680 [690]	530	1050	800	92.0	41.5	33.5	74.0	17.0
19	900	13	1.5(90)	2PCO	1600×1400	2500×2050	1360	1140	705 [715]	640	1110		1740	900	111.0	111.0	45.0	36.5	74.0	20.0	32.0								
20			2.0(120)														47.5	38.5		20.0	33.5								
21			2.5(150)														115.5	70.5		59.0	95.0	36.5	55.5						
22			1.0(60)			1100×2100	2000×2600	1140	860	1107 [1112]	530	845	45	1330			800	93.0	42.0	33.5	75.0	17.5	29.5						
23			1.5(90)																45.5	37.0	20.0	32.0							
24			1.75(105)																2050×2600	1180	870	640	905	900	113.0	69.5	58.5	93.5	36.5
25	1020	15	2.0(120)	2PCO	900	1600×1550	2350×2000	1250	1100	755 [765]	530	1050		1740	800	99.5	44.0	35.5	79.0	17.5	30.5								
26			2.5(150)														47.5	38.5		20.0	33.5								
27			1.0(60)														2500×2100	1360		1140	705 [715]	640	1110	900	111.0	69.0	58.0	92.5	36.0
28			1.5(90)			1100×2300	2150×2800	1235	915	1207 [1212]	530	845	45	1430	800		93.0	44.0	35.5	79.0	17.5	30.5							
29			1.75(105)																										
30			2.0(120)																										
31	1150	17	2.5(150)	2PCO	1000	1600×1700	2450×2150	1320	1130	830 [840]	640	1110	1740	900	116.5	55.5	44.5	93.5	24.0	39.5									
32			1.0(60)													1800×1500	2650×2050		1420	1230	730 [740]	1210	1940	116.0	60.5	49.0	28.0	44.0	
33			1.5(90)																										
34			1.75(105)																										
35			2.0(120)			2700×2050	1460	1240						126.5		74.0	62.0	103.5	37.5	58.0									
36			2.5(150)																										
37	1.0(60)																												
38	1150	17	1.5(90)	2PCO	1000	1800×1500	2650×2050	1420	1230	730 [740]	1210	1940	900	116.0	55.0	44.0	92.5	24.0	39.5										
39			1.75(105)																										
40			2.0(120)																										
41			2.5(150)			126.5	74.0	62.0	103.5	37.5	58.0																		
42			1.0(60)				126.5	74.0	62.0	103.5	37.5	58.0																	
43			1.5(90)																										
44	1.75(105)																												
45	1150	17	2.0(120)	2PCO	1000	1800×1500	2650×2050	1420	1230	730 [740]	1210	1940	900	116.0	55.0	44.0	92.5	24.0	39.5										
46			2.5(150)																										
47			1.0(60)																										
48			1.5(90)																										
49			1.75(105)																										
50			2.0(120)																										
51	1150	17	2.5(150)	2PCO	1000	1800×1500	2650×2050	1420	1230	730 [740]	1210	1940	900	116.0	60.0	49.0	92.5	28.0	43.5										
52			1.0(60)																										
53			1.5(90)																										
54			1.75(105)																										
55			2.0(120)																										
56			2.5(150)																										

- *1 []:Travel distance > 60m
- *2 []:With fire rated door
- *3 Rated speed 1.0m/s : Travel distance ≤ 60m
 Rated speed 1.5 , 1.75m/s : Travel distance ≤ 80m
 Rated speed 2.0 , 2.5m/s : Travel distance ≤ 120m
- *4 The pit reaction loading differs depending on the specifications and design, please consult Hitachi or local agent.

Note: Above tables shows the dimensions on the following conditions
(1) Single elevator in hoistway (2) Without counterweight safety
Please consult Hitachi or local agent if other specifications are required.

■ **Based on SS550**

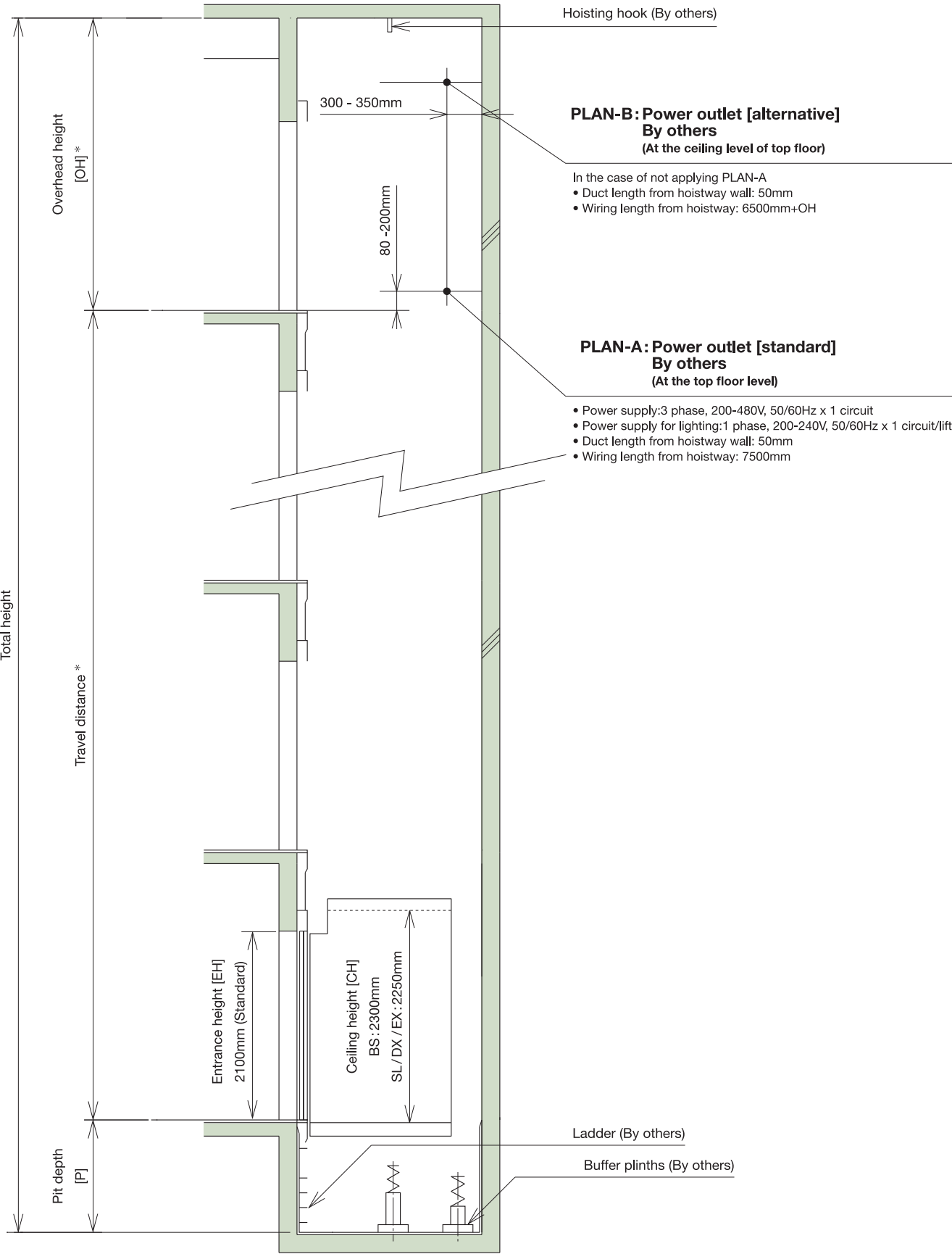
No.	Load [kg]	Persons	Rated speed [m/s] (m/min)	Door type	Door OP width W [mm]	Car internal size A × B [mm]	Hoistway X × Y [mm]	Location [mm]								Pit reaction loading *3×4 [kN]					
																Car side			Counterweight side		
								X3	X4	C*2	D	E	F	RGC	RGW	RC1	RC2	RC3	RW1	RW2	RW3
57	1200	17	1.0(60)	2PCO	1100	2000×1400	2850×2000	1520	1330	680 [690]	640	1310	—	2140	900	122.5	57.0	46.0	98.0	24.5	40.5
58			1.5(90)				2900×2050	1560	1340	705 [715]							62.5	50.5		28.5	45.0
59			1.75(105)																		
60			2.0(120)																		
61	2.5(150)	1300×2300	2250×2800	1315		935	1207 [1212]	1005	95	1530		128.5	59.0	47.5		102.5			25.0		
62	1.5(90)												64.0	52.0			28.5	46.0			
63	1.75(105)																				
64	2.0(120)																				
65	2.5(150)	2S2P	1000	1800×1750	2650×2200	1420	1230	855 [865]	1210	—	1940	66.25x2sets	60.5	48.5	105.0	25.0	42.5				
66	1.5(90)																				
67	1.75(105)																				
68	2.0(120)																				
69	2.5(150)	2PCO	1100	2000×1550	2850×2100	1520	1330	755 [765]	1310	—	2140	66.25x2sets	60.5	48.5	105.0	25.0	42.5				
70	1.5(90)																				
71	1.75(105)																				
72	2.0(120)																				
73	2.5(150)	2S2P	1200	1400×2400	2350×2900	1365	985	1257 [1262]	1055	95	1630	72.0x2sets	64.0	51.5	114.0	26.0	44.5				
74	1.5(90)																				
75	1.75(105)																				
76	2.0(120)																				
77	2.5(150)	2PCO	1100	2000×1800	2850×2250	1520	1330	880 [890]	1310	—	2140	77.75x2sets	67.5	54.0	122.5	26.5	46.5				
78	1.5(90)																				
79	1.75(105)																				
80	2.0(120)																				
81	2.5(150)	2PCO	1100	2100×1700	2950×2150	1570	1380	830 [840]	1360	—	2240	76.5x2sets	66.5	53.0	120.5	26.5	46.0				
82	1.5(90)																				
83	1.75(105)																				
84	2.0(120)																				
85	2.5(150)	2S2P	1200	1500×2500	2550×3000	1580	970	1307 [1312]	1130	145	1730	83.0x2sets	64.5	56.5	131.5	34.5	50.5				
86	1.5(90)																				
87	1.75(105)																				
88	2.0(120)																				
89	2.5(150)	2PCO	1100	2000×2000	2950×2450	1635	1315	980 [990]	1335	—	2140	86.5x2sets	66.5	58.5	136.5	35.0	51.5				
90	1.5(90)																				
91	1.75(105)																				
92	2.0(120)																				
93	2.5(150)	2S2P	1300	1500×2700	2550×3200	1530	1020	1407 [1412]	1130	95	1730	88.0x2sets	67.0	59.0	137.5	35.5	52.0				
94	1.5(90)																				
95	1.75(105)																				
96	2.0(120)																				
97	2.5(150)	2PCO	1100	2000×2100	2950×2550	1635	1315	1030 [1040]	1335	—	2140	90.75x2sets	68.5	60.5	141.5	36.0	53.0				
98	1.5(90)																				
99	1.75(105)																				
100	2.0(120)																				
101	2.5(150)	2S2P	1300	1500×2700	2550×3200	1530	1020	1407 [1412]	1130	95	1730	88.0x2sets	67.0	59.0	137.5	35.5	52.0				
102	1.5(90)																				
103	1.75(105)																				
104	2.0(120)																				
105	2.5(150)	2PCO	1100	2000×2100	2950×2550	1635	1315	1030 [1040]	1335	—	2140	90.75x2sets	68.5	60.5	141.5	36.0	53.0				
106	1.5(90)																				
107	1.75(105)																				
108	2.0(120)																				

- *1 ():Travel distance > 60m
- *2 []:With fire rated door
- *3 Rated speed 1,0m/s : Travel distance ≤ 60m
 Rated speed 1.5 , 1.75m/s : Travel distance ≤ 80m
 Rated speed 2.0 , 2.5m/s : Travel distance ≤ 120m
- *4 The pit reaction loading differs depending on the specifications and design, please consult Hitachi or local agent.

Note: Above tables shows the dimensions on the following conditions
(1) Single elevator in hoistway (2) Without counterweight safety
Please consult Hitachi or local agent if other specifications are required.

Overhead Height and Pit Depth

Hoistway section



* If total number of floors is 2, please consult Hitachi or local agent about minimum travel distance and overhead height.

■Dimensions for overhead height, pit depth and other specifications

Standard overhead height : OH *1 *2 *3 [mm]

No.	Rated speed [m/s] (m/min)	Hitachi standard Hitachi standard for India			EN81-20/50			Malaysian regulations		
		Load ≤ 1050kg	Load ≥ 1150kg	Load > 1600kg	Load ≤ 1050kg	Load ≥ 1150kg	Load > 1600kg	Load ≤ 1050kg	Load ≥ 1150kg	Load > 1635kg
1	1.0(60)	3750 (3870)	4150 (4270)	4300 (4420)	4150 (4270)	4250 (4370)	4300 (4420)	4200 (4320)	4300 (4420)	4350 (4470)
2	1.5(90)									
3	1.75(105)	4050(4170)	4350(4470)	4350(4470)	4350(4470)	4350(4470)	4350(4470)	4400(4520)	4400(4520)	4400(4520)
4	2.0(120)	4600(4600)	4600(4600)	—	4600(4600)	4600(4600)	—	4650(4650)	4650(4650)	—
5	2.5(150)	4700(4700)	4700(4700)		4700(4700)	4700(4700)		4750(4750)	4750(4750)	

No.	Rated speed [m/s] (m/min)	SS550		
		Load ≤ 1050kg	Load ≥ 1150kg	Load > 1630kg
1	1.0(60)	3950(4070)	4150(4270)	4300(4420)
2	1.5(90)	4150(4270)	4400(4520)	4400(4520)
3	1.75(105)	4300(4420)	4500(4620)	4500(4620)
4	2.0(120)	5500(5620)	5500(5620)	—
5	2.5(150)	5650(5770)	5650(5770)	

Minimum pit depth : P *4 [mm]

No.	Rated speed [m/s] (m/min)	Hitachi standard Hitachi standard for India EN81-20/50			Malaysian regulations			SS550		
		Load ≤ 1050kg	Load ≥ 1150kg	Load > 1600kg	Load ≤ 1050kg	Load ≥ 1150kg	Load > 1635kg	Load ≤ 1050kg	Load ≥ 1150kg	Load > 1630kg
1	1.0(60)	1350	1600	1650	1500	1750	1750	1500	1750	1900
2	1.5(90)							1600	1900	2050
3	1.75(105)	1450	1700	1800	1600	1850	1900	1650	2100	2250
4	2.0(120)	2000	2300	—	2050	2350	—	2050(2000)	2300	—
5	2.5(150)	2050	2350		2100	2400		2200(2050)	2350	

Others

No.	Rated speed [m/s] (m/min)	Maximum number of stops	Maximum travel distance [m]
1	1.0(60)	24	60
2	1.5(90)	32	80
3	1.75(105)		
4	2.0(120)	36	120
5	2.5(150)		

■Rated Speed 1.75m/s or less

- *1 (): SL/DX/EX series ceiling
- *2 Travel distance ≤ 30m
30m < Travel distance ≤ 60m : Above overhead height + 50mm
60m < Travel distance ≤ 80m : Above overhead height + 100mm
- *3 Overhead height will be increased accordingly if either EH or CH increases.
- *4 Travel distance ≤ 45m
LOAD ≤ 1050kg 45m < Travel distance ≤ 60m : Above pit depth + 50mm
60m < Travel distance : Above pit depth + 200mm
LOAD ≥ 1150kg 45m < Travel distance : Above pit depth + 50mm

■Rated Speed 2.0m/s or 2.5m/s

- *1 (): SL/DX/EX series ceiling
- *2 30m ≤ Travel distance ≤ 45m
45m < Travel distance ≤ 80m : Above overhead height + 50mm
80m < Travel distance ≤ 120m : Above overhead height + 100mm
- *3 Overhead height will be increased accordingly if either EH or CH increases.
- *4 For SS550, (): Travel distance ≤ 60m

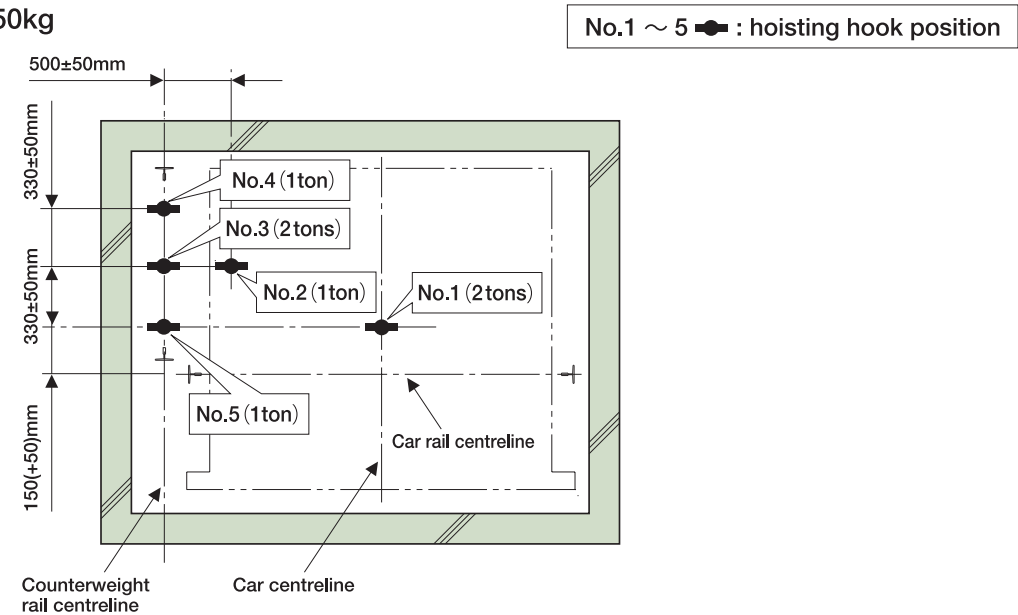
Note: Above tables shows the dimensions based on standard specifications.
Please consult Hitachi or local agent if other specifications are required.

Location of hoisting hook and hoisting beam

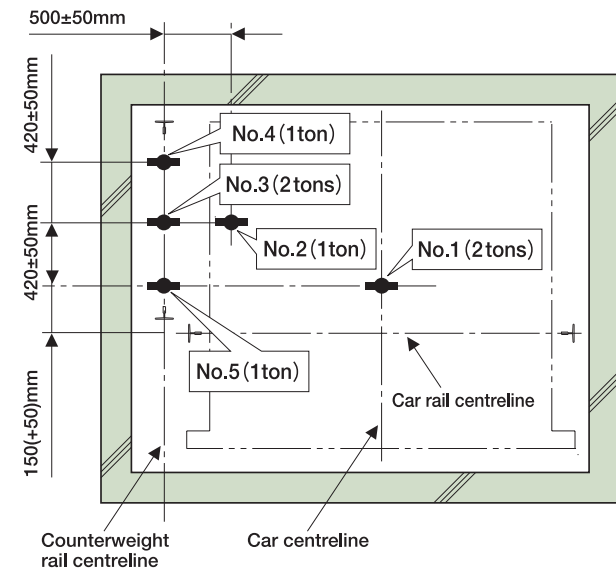
If the hoistway is made of reinforced concrete, hoisting hooks (installed by other contractors) are required at the top of the hoistway. If the hoistway is a steel structure, hoisting beams (installed by other contractors) are required at the top of the hoistway. The details of the hoisting hook and hoisting beam mounting position are as follows:

① Hoisting hooks

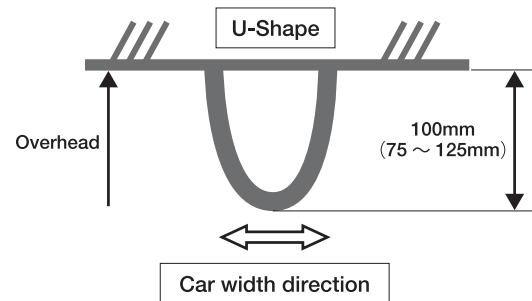
1. Rated Load ≤ 1050kg



2. Rated Load > 1050kg



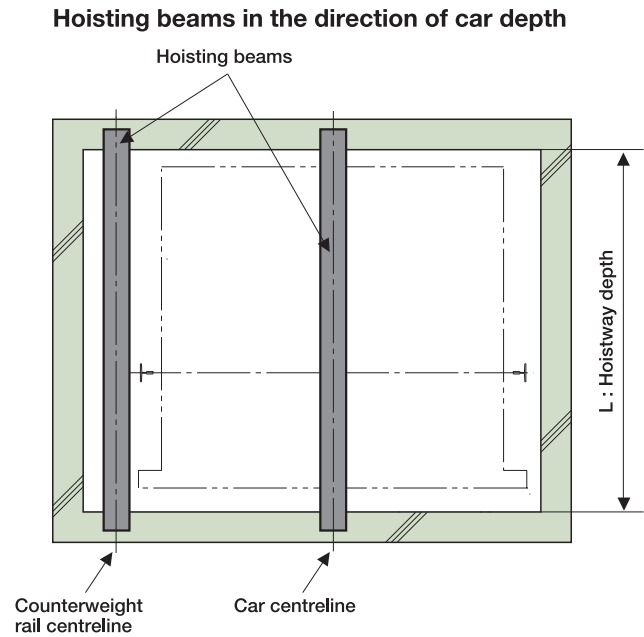
3. Orientation and size of Hoisting Hooks



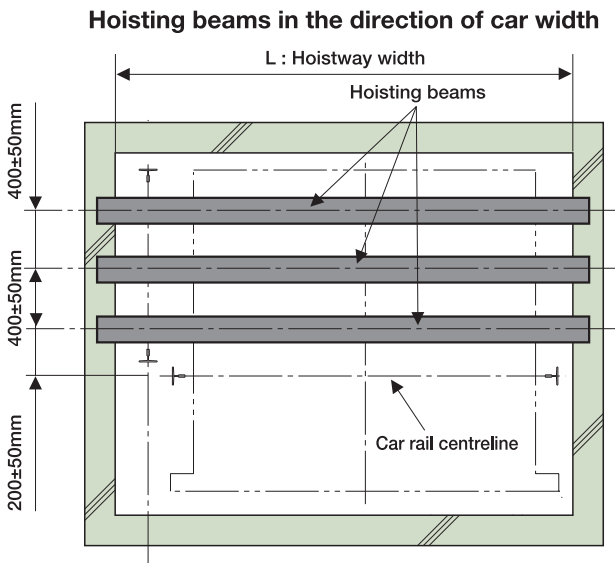
Note : 1. The hoisting hooks should be orientated such that the U-shape is facing the hoistway landing entrance.
2. This hoisting hook size is required to ensure that the hoisting equipment can fit in.

② Hoisting beams

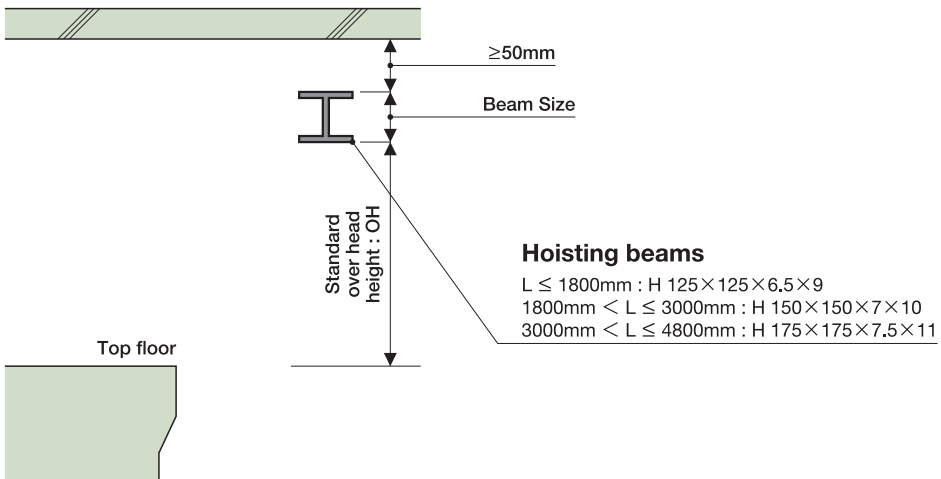
1. Hoisting beams layout (Standard)



2. Hoisting beams layout (Alternative)



3. Height of Hoisting beams



Electrical information

Required capacity of circuit breaker, transformer & starting power at building side

■Electrical Data

No.	Load [kg]	Rated speed [m/s] (m/min)	Motor capacity [kW]	Supply voltage [V]	Breaker capacity [A]			Transformer capacity [kVA]			Starting power [kVA]	Lead-in wire for drive [mm ²]			Earth wire [mm ²]	Calorific value [kcal/hr]			
					1 unit	2 units	3 units	1 unit	2 units	3 units		1 unit	2 units	3 units					
1	451 ~ 630	1.0(60)	3.9	220-230	100	125	150	5	9	12	15	22.0	38	60	3.5	830			
2				380-415	20	30	30					5.5	14	14	2.0				
3				440-480	50	75	100					5.5	8		2.0				
4		1.5(90)	5.8	220-230	100	125	150	6	11	15	20	22.0	60	60	3.5	1250			
5				380-415	30	30	40					8.0	14	22	2.0				
6				440-480	50	75	100					5.5		14					
7		1.75(105)	6.8	220-230	100	125	150	7	12	17	23	38.0	60	100	3.5	1460			
8				380-415	30	40	50					8.0	14	22	2.0				
9				440-480	50	75	100							14					
10	631 ~ 750	1.0(60)	4.6	220-230	100	125	150	5	9	12	16	22.0	38	60	3.5	990			
11				380-415	20	30	40					5.5	14	14	2.0				
12				440-480	50	75	100						8						
13		1.5(90)	6.9	220-230	100	125	150	7	12	17	23	38.0	60	100	3.5	1490			
14				380-415	30	40	50	6	11	15		8.0	14	22	2.0				
15				440-480	50	75	100	7	12	17				26			100	100	100
16		1.75(105)	8.1	220-230	100	125	150				38.0	60	100		22	22	22		
17				380-415	40	40	50				14.0	22							
18				440-480	50	75	100				8.0	14							
19	748 ~ 750	2.0(120)	11.0	220-230	175	200	250	14	26	36	44	60.0	150	150(114m)*1	5.5	1980			
20				380-415	40	50	75					22.0	38	60	3.5				
21				440-480	100	100	150					14.0	22	38					
22		2.5(150)	13.0	220-230	175	200	250	16	30	41	50	100.0	150(138m)*1	150(98m)*1	5.5	2470			
23				380-415	50	60	100					22.0	38	60	3.5				
24				440-480	100	100	150					14.0		38					
25		751 ~ 900	1.0(60)	5.6	220-230	100	125	150	6	11	15	19	22.0	14	60	2.0	1190		
26					380-415	30	30	40					8.0		22				
27					440-480	50	75	100					5.5		14				
28	1.5(90)		8.3	220-230	100	125	150	8	14	19	27	38.0	60	100	3.5	1780			
29				380-415	40	40	50	7	12	17		14.0	22	38					
30				440-480	50	75	100	8	14	19		8.0	14	22					
31	1.75(105)		9.7	220-230	100	125	150	10	17	24	30	38.0	100	150	5.5	2080			
32				380-415	40	40	60	9	16	22		14.0	22	38	3.5				
33				440-480	50	75	100	10	17	24		8.0	14	22					
34	901 ~ 1050	2.0(120)	12.0	220-230	175	200	250	15	28	39	47	100.0	150(148m)*1	150(106m)*1	5.5	2380			
35				380-415	50	60	75					22.0	38	60	3.5				
36				440-480	100	100	150					14.0		38					
37		2.5(150)	15.0	220-230	175	200	250	18	33	46	57	100.0	150(121m)*1	150(86m)*1	5.5	2970			
38				380-415	50	75	100					22.0	38	60	3.5				
39				440-480	100	100	150					38.0	60	100					
40		1051 ~ 1150	1.0(60)	6.5	220-230	100	125	150	7	12	17	22	38.0	60	100	2.0	1390		
41					380-415	30	40	40					8.0	14	22			3.5	
42					440-480	50	75	100					5.5		14				
43	1.5(90)		9.7	220-230	100	125	150	9	16	22	30	38.0	100	150	5.5	2080			
44				380-415	40	40	60	8	14	19		14.0	22	38	3.5				
45				440-480	50	75	100	9	16	22		8.0	14	22					
46	1.75(105)		11.7	220-230	100	125	150	10	17	24	36	60.0	100	150	5.5	2430			
47				380-415	40	50	75					14.0	38	38	3.5				
48				440-480	50	75	100												
49	2.0(120)	13.0	220-230	175	200	250	16	30	41	50	100.0	150(138m)*1	150(98m)*1	5.5	2770				
50			380-415	50	60	100					22.0	38	60	3.5					
51			440-480	100	100	150					14.0		38						
52	2.5(150)	17.0	220-230	175	200	250	20	37	51	64	100.0	150(108m)*1	150(77m)*1	5.5	3460				
53			380-415	60	75	100					38.0	60	100						
54			440-480	100	100	150					22.0	38	60						
55	1051 ~ 1150	1.0(60)	7.1	220-230	100	125	150	7	12	17	23	38.0	60	100	3.5	1520			
56				380-415								40	40	50	8.0		14	22	2.0
57				440-480								50	75	100					
58	1051 ~ 1150	1.5(90)	11.0	220-230	100	125	150	10	17	24	34	60.0	100	150	5.5	2280			
59				380-415	40	50	75	9	16	22		14.0	22	38	3.5				
60				440-480	50	75	100	10	17	24									

Note: Maximum length of lead-in wire is 150m, maximum lead-in wire size is 150mm².
*1 () :Maximum length of lead-in wire with 150mm².
*2 Please consult Hitachi or local agent about maximum size and maximum length of lead-in wire.

■Electrical Data

No.	Load [kg]	Rated speed [m/s] (m/min)	Motor capacity [kW]	Supply voltage [V]	Breaker capacity [A]			Transformer capacity [kVA]			Starting power [kVA]	Lead-in wire for drive [mm ²]			Earth wire [mm ²]	Calorific value [kcal/hr]			
					1 unit	2 units	3 units	1 unit	2 units	3 units		1 unit	2 units	3 units					
61	1051 ~ 1150	1.75(105)	13	220-230	100	125	150	11	19	26	40	60	100	150(146m) ^{*1}	5.5	2660			
62				380-415	50	60	75					14	38	38	3.5				
63				440-480		75	100					22	22		3.5				
64		2.0(120)	15	220-230	175	200	250	18	33	46	57	100	150(121m) ^{*1}	150(86m) ^{*1}	5.5	3030			
65				380-415	50	75	100					22	60	60	3.5				
66				440-480	100	100	150						38		38		3.5		
67		2.5(150)	18	220-230	175	200	250	21	39	54	68	150	150(102m) ^{*1}	150(73m) ^{*1}	5.5	3790			
68				380-415	60	75	125					38	60	100			3.5		
69				440-480	100	100	150					22	38	60	3.5				
70				220-230	100	125	150					8	14	19			27	38	60
71	1.0(60)	8.3	380-415	40	40	50	7	12	17	14	22	38							
72			440-480	50	75	100	8	14	19	8	14	22							
73			220-230	100	125	150	11	19	26	40	60	100	150(146m) ^{*1}	5.5	2670				
74	1.5(90)	13	380-415	50	60	75					14	38	38	3.5					
75			440-480	75	100	14					22								
76	1151 ~ 1350	1.75(105)	15	220-230	100	125	150	12	21	29	45	60	150	150(128m) ^{*1}	5.5	3120			
77				380-415	50	60	100					22	38	60	3.5				
78				440-480		75													
79		2.0(120)	17	220-230	175	200	250	20	37	51	64	100	150(108m) ^{*1}	150(77m) ^{*1}	5.5	3560			
80				380-415	60	75	100					38	60	100	3.5				
81				440-480	100	100	150					22	38	60					
82		2.5(150)	21	220-230	175	200	250	25	46	64	78	150	150(88m) ^{*1}	150(63m) ^{*1}	5.5	4450			
83				380-415	60	100	125					24	44	62			38	60	100
84				440-480	100		150					25	46	64			22		
85		1351 ~ 1635	1.0(60)	10	220-230	100	125	150	9	16	22	31	38	100	150	3.5	2150		
86	380-415				40	50	60	14					22	38					
87	440-480				50	75	100	8					14	22					
88	1.5(90)		15	220-230	100	125	150	12	21	29	45	60	150	150(128m) ^{*1}	5.5	3230			
89				380-415	50	60	100					22	38	60	3.5				
90				440-480	75	14						22	38						
91	1.75(105)		18	220-230	100	125	150	15	26	36	53	100	150	150(109m) ^{*1}	5.5	3770			
92				380-415	60	100	14					24	33	22			38	60	
93				440-480	50		15					26	36	14				38	3.5
94	2.0(120)		20	220-230	175	200	250	25	46	64	78	150	150(88m) ^{*1}	150(63m) ^{*1}	5.5	4310			
95		380-415		60	100	24	44					62	38	60			100		
96		440-480		100		150	25					46	64					22	
97	2.5(150)	25	220-230	175	200	250	30	55	77	95	150(131m) ^{*1}	150(72m) ^{*1}	*2	8.0	5390				
98			380-415	75	125	150					38	100	150	5.5					
99			440-480	100	100						60	100							
100	1636 ~ 1800	1.0(60)	12	220-230	175	200	250	10	17	24	38	60	150	144(63m) ^{*1}	3.5	2380			
101				380-415	50	50	75					14	38	38					
102				440-480	100	100	150					22							
103		1.5(90)	17	220-230	175	200	250	14	24	33	51	100	150(144m) ^{*1}	150(105m) ^{*1}	5.5	3560			
104				380-415	60	75	100					22	38	60	3.5				
105				440-480	100	100	150					14		38					
106		1.75(105)	20	220-230	175	200	250	16	28	38	60	100	150(124m) ^{*1}	150(90m) ^{*1}	5.5	4150			
107				380-415	60	100	125					22	60	60					
108				440-480	100		150					38							
109		1801 ~ 2000	1.0(60)	13	220-230	175	200	250	11	19	26	40	60	150	150(134m) ^{*1}	3.5	2640		
110	380-415				50	60	75	14					38	38					
111	440-480				100	100	150	22					22						
112	1.5(90)		19	220-230	175	200	250	15	26	36	57	100	150(130m) ^{*1}	150(94m) ^{*1}	5.5	3960			
113				380-415	60	75	100					22	38	60	3.5				
114				440-480	100	100	150					38		38					
115	1.75(105)		22	220-230	175	200	250	18	31	43	65	150	150(113m) ^{*1}	150(82m) ^{*1}	5.5	4620			
116		380-415		75	100	125	38					100	60						
117		440-480		100		150	22					60		60					

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